




Deltek

# Deltek Maconomy®

Concepts Guide

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# Contents

Overview .....	1
Introduction to Modules .....	2
Accounts Payable .....	2
Purchase Processes .....	2
Accounts Receivable .....	3
API .....	3
Banking .....	3
Introduction to Electronic Payment .....	3
Introduction to Electronic Customer Payment .....	3
Manual Invoicing or Electronic Collection and Customer Payment Notification .....	4
Budget .....	4
Creating Budget Models .....	4
Creating Budget Entries .....	5
Contact Management .....	12
Introduction .....	12
Opportunity Budgets Workspace .....	14
EU Statistics .....	15
EU Purchase and Sale .....	16
CN Codes .....	16
EU Acquisition Tax .....	17
Triangulation .....	17
Reports in Maconomy .....	17
Intrastat and Sales List System Reports .....	17
Fixed Assets .....	18
Introduction to the Fixed Assets Module .....	18
Structure of the Fixed Assets Module .....	18
Documentation .....	19
Integration with the General Ledger .....	19
Asset Transaction Types .....	19
Asset Sale .....	20
Transfer to New Group .....	20
Asset Relocation/Internal Sale .....	20
Format Specification .....	21

---

Formats, Forms, Records, and Fields .....	22
Application in the Banking Module.....	23
Application in the G/L Module .....	23
General Ledger .....	23
Multiple Currencies .....	24
Human Resources .....	25
Inventory .....	26
Item Purchase .....	26
Job Cost.....	26
Creation Section .....	26
Resource Planning .....	35
Central Concepts of Resource Planning.....	36
Sales Orders.....	42
Subscription .....	42
Central Concepts in the Subscription Module .....	42
Subscriptions and Issues .....	43
Subscription Orders .....	43
Work Flows in the Subscription Module.....	44
Creating and Maintaining Subscriptions .....	44
Creating and Maintaining Subscription Orders .....	44
Invoicing Subscriptions .....	44
Delivery .....	45
Updating Price Revision.....	45
Set-Up.....	46
Dimensions.....	47
Overview.....	47
Global and Local Dimensions .....	47
Default Values.....	48
Dimension Combinations .....	48
Company-Specific Dimension Values.....	48
Derivations .....	49
Dimension Derivation Process .....	49
When a New Entry is Added... ..	50
When an Existing Entry is Updated... ..	51
When a Journal Entry Posts.....	52
When Derivations Do Not Occur as Expected .....	52

---

Multiple G/L Entries.....	52
Customer or Vendor.....	52
Date-Specific Derivations .....	52
Workflow.....	52
Set Up Dimensions.....	53
BPM Reporting.....	53
Review Available Dimensions.....	54
Set up Global Dimensions .....	54
Set up Local Dimensions .....	56
Create Default Values.....	56
Companies Not Using Dimensions .....	56
Set up Dimension “Short-Cuts” .....	56
Tag Each Master Record.....	57
Set Up Derivations.....	59
Set up Global Derivations .....	59
Set-Up Derivations by Company and / or Transaction Type .....	60
People Planner Integration.....	61
People Planner Admin Tool.....	61
Integration with Microsoft Outlook .....	61
Integration with Maconomy.....	61
Periodic Job Budget System Parameters .....	62
Capacity Overview Tab and the People Planner Tab.....	63
Additional Fields Sent to People Planner .....	63
Create Standard People Planner Integration User .....	64
Periodic Job Budget Action.....	64
System Architecture .....	64
Absence Management Overview .....	66
Workflow.....	66
General Process .....	67
General Process for Setup .....	67
General Process for Everyday Use .....	67
Color Coding and Absence Types .....	68
Notifications .....	68
Importing Data .....	68
Manage Absences .....	68
Create / Submit Absences .....	69

Create / Submit Allowance Requests .....	69
View Absences .....	70
Approver Absences .....	70
View Existing Requests .....	71
Approve / Reject Absence Requests .....	71
Approve / Reject Allowance Requests.....	71
Modify Absence Requests .....	71
Year-End Process .....	72
View and Modify Allowance Hours .....	72
Assign Initial Allowance .....	72
Absence Entries .....	72
Workflow Setup .....	72
Vacation Calendars.....	73
Absence Types .....	73
Employee Teams .....	73
System Setup .....	74
Advanced Costing .....	75
Workflow .....	76
Compensation Code Setup.....	76
Compensation Process.....	77
Gross Pay Calculation .....	77
Gross Pay Calculation Period .....	77
Overall Gross Pay Calculation .....	79
Gross Pay for Prior Period .....	80
Base Salary Rates .....	80
Posting of Gross Pay .....	81
Bi-weekly Payroll Calculation Support.....	82
Set Up Compensation Codes .....	86
Set up Pay Period Calendars .....	86
Set up Compensation Model .....	87
Set up Compensation Type .....	87
Calculate Gross Pay to Use in Payroll Systems.....	88
Calculate Base Salary Rate to Use in Payroll Systems .....	88
Setup .....	89
Set Up Batch Overhead Maintenance .....	89
Create New Overhead Maintenance Specification .....	90

Change Overhead Manually .....	90
Change Overhead By Batch .....	90
Compensation Code Setup.....	91
Approval Hierarchies.....	93
Workflow.....	93
Set Up States .....	94
Screenshot.....	95
Notifications .....	95
Set Up an Approval Hierarchy.....	95
Screenshot.....	96
Notifications .....	96
Create a Vendor .....	96
Screenshot.....	96
Notifications .....	97
Approve a Vendor.....	97
Screenshot.....	97
Notifications .....	97
Add Vendor Information.....	97
Screenshot.....	98
Notifications .....	98
Setup .....	98
Reporting.....	99
Introduction to Reporting Structures.....	99
Central Concepts.....	99
Trees.....	99
Nodes.....	100
Parents and Children .....	100
Leaves .....	100
Levels.....	101
Allowed and Disallowed Structures .....	101
Creating and Using Reporting Hierarchies .....	102
Self-Invoicing.....	104
Workflow.....	104
“How to” Section .....	105
Enable Self-Invoice Creation for a Vendor .....	105
Create a Purchase Order for a Subcontractor.....	105

Create a Self-Invoice .....	106
Create Self-Invoices by Batch .....	106
Allocate Subcontractor Differences before Reconciliation.....	107
Notifications .....	109
ActionFromRecruitment .....	109
ApprovalTask .....	109
ApproveAbsenceCalendarLines .....	109
ApproveAllowanceRequestAbsenceEntries .....	110
ApproveCompanyCustomer .....	110
ApproveCompanyCustomerByType .....	110
ApproveCompanyCustomerSubstitute .....	111
ApproveCompanyCustomerSubstituteByType .....	111
ApproveCompanyVendor .....	112
ApproveCompanyVendorByType .....	112
ApproveCompanyVendorSubstitute .....	112
ApproveCompanyVendorSubstituteByType .....	113
ApproveCustomer .....	113
ApproveCustomerByType .....	113
ApproveCustomerSubstitute .....	114
ApproveCustomerSubstituteByType.....	114
ApproveDailyTimeSheet .....	114
ApproveEmployee.....	115
ApproveEmployeeByType .....	115
ApproveEmployeeRequisition.....	115
ApproveEmployeeSubstitute .....	116
ApproveEmployeeSubstituteByType .....	116
ApproveExpenseSheet .....	117
ApproveExpenseSheetHeader .....	117
ApproveExpenseSheetHeaderByType .....	117
ApproveExpenseSheetHeaderSubstitute .....	118
ApproveExpenseSheetHeaderSubstituteByType .....	118
ApproveExpenseSheetLine .....	118
ApproveExpenseSheetLineByType .....	119
ApproveExpenseSheetLineSubstitute .....	119
ApproveExpenseSheetLineSubstituteByType .....	120
ApproveExpenseSheetLines .....	120



---

ApproveFinanceBudget .....	120
ApproveInvoiceAllocationLine.....	121
ApproveInvoiceAllocationLineByType .....	121
ApproveInvoiceAllocationLineSubstitute.....	122
ApproveInvoiceAllocationLineSubstituteByType .....	122
ApproveInvoiceDrafts.....	122
ApproveInvoiceDraftsApprover .....	123
ApproveInvoiceDraftsApproverByType.....	123
ApproveInvoiceDraftsSubstitute .....	123
ApproveInvoiceDraftsSubstituteByType .....	124
ApproveJob .....	124
ApproveJobByType.....	125
ApproveJobSubstitute.....	125
ApproveJobSubstituteByType .....	125
ApproveJobBudget .....	126
ApproveJobBudgetByType .....	126
ApproveJobBudgetSubstitute .....	126
ApproveJobBudgetSubstituteByType .....	127
ApproveMileageSheet.....	127
ApproveMileageSheetHeader.....	127
ApproveMileageSheetHeaderByType .....	128
ApproveMileageSheetHeaderSubstitute.....	128
ApproveMileageSheetHeaderSubstituteByType .....	128
ApproveMileageSheetLine.....	129
ApproveMileageSheetLineByType .....	129
ApproveMileageSheetLineSubstitute.....	130
ApproveMileageSheetLineSubstituteByType .....	130
ApprovePurchaseOrderHeader .....	130
ApprovePurchaseOrderHeaderByType .....	131
ApprovePurchaseOrderHeaderSubstitute .....	131
ApprovePurchaseOrderHeaderSubstituteByType .....	132
ApprovePurchaseOrderLine .....	132
ApprovePurchaseOrderLineByType .....	132
ApprovePurchaseOrderLineSubstitute .....	133
ApprovePurchaseOrderLineSubstituteByType .....	133
ApproveTimeSheet .....	134

ApproveTimeSheetHeaderApprovalHierarchy .....	134
ApproveTimeSheetHeaderApprovalHierarchyByType .....	134
ApproveTimeSheetHeaderSubstituteApprovalHierarchy .....	135
ApproveTimeSheetHeaderSubstituteApprovalHierarchyByType .....	135
ApproveTimeSheetLineApprovalHierarchy.....	135
ApproveTimeSheetLineApprovalHierarchyByType .....	136
ApproveTimeSheetLineSubstituteApprovalHierarchy .....	136
ApproveTimeSheetLineSubstituteApprovalHierarchyByType .....	137
ApproveTimeSheetLines .....	137
ApproveUserInformation .....	137
ApproveUserInformationByType.....	138
ApproveUserInformationSubstitute .....	138
ApproveUserInformationSubstituteByType.....	138
ApproveVendor .....	139
ApproveVendorByType.....	139
ApproveVendorInvoiceJournal.....	139
ApproveVendorInvoiceJournalByType .....	140
ApproveVendorInvoiceJournalSubstitute.....	140
ApproveVendorInvoiceJournalSubstituteByType .....	141
ApproveVendorSubstitute .....	141
ApproveVendorSubstituteByType.....	141
ApprovedAbsenceCalendarLines .....	142
ApprovedAllowanceRequestAbsenceEntries .....	142
CollectionActivity.....	142
CreditLimit.....	143
DailyTimeSheetNotCreated .....	143
InvoicesSoonDue.....	143
JobExceedsBudget .....	144
JobRiskDue.....	144
JobWithoutBudget.....	144
NewJobCreated .....	145
PresubmittedEmployeeRequisitions .....	145
PrintJobInvoice .....	146
RejectedAbsenceCalendarLines .....	146
RejectedAllowanceRequestAbsenceEntries .....	146
RejectedCompanyCustomer.....	147

---

RejectedCompanyVendor.....	147
RejectedCustomer .....	147
RejectedEmployee.....	148
RejectedExpenseSheet .....	148
RejectedExpenseSheetLines.....	148
RejectedInvoiceDrafts.....	149
RejectedJob .....	149
RejectedJobBudget.....	149
RejectedMileageSheet.....	150
RejectedMileageSheetLines .....	150
RejectedPurchaseOrder .....	150
RejectedTimeSheetApprovalHierarchy.....	151
RejectedTimeSheetLines.....	151
RejectedUserInformation .....	151
RejectedVendor .....	152
RejectedVendorInvoice.....	152
SubmitAllowanceRequestAbsenceEntries.....	152
SubmitCompanyCustomer.....	153
SubmitCompanyVendor .....	153
SubmitCustomer .....	153
SubmitDailyTimeSheet .....	154
SubmitEmployee.....	154
SubmitExpenseSheet .....	154
SubmitFinanceBudget.....	155
SubmitInvoiceDraft.....	155
SubmitJob .....	155
SubmitMileageSheet.....	156
SubmitTimeSheet .....	156
SubmitUserInformation .....	157
SubmitVendor .....	157
SubstituteTask .....	157
TaskFromEmployeeControl .....	158
TimeSheetNotCreated .....	158
UnassignedVendorInvoices .....	158
UnreadVendorInvoiceMessage .....	159
VendorInvoicesForAllocation .....	159

VendorInvoicesForAllocationNoResponsiblePerson .....	159
Email Alerts .....	161
Before You Begin .....	161
Setup .....	162
Email Alert Templates .....	163
Procedures .....	163
Setup Instructions .....	165
System Parameters .....	165
Financial Budgeting.....	166
Overview of Budget Templates .....	166
Information in Templates .....	166
Financial Budgets and Maconomy.....	166
Getting Started .....	166
Finance Budgeting Workflow .....	166
Set Up Budgets Template.....	167
Create the Template and Set Up Basic Information .....	167
Create Budget Hierarchy .....	168
Create Budget Chart of Account.....	169
Add Dimensions.....	169
Set Up Employee Categories .....	170
Deploy Templates .....	170
Interface Overview.....	170
Overview of Budget Template Lines.....	171
Employee Sub-budget .....	171
Direct Costs Sub-Budget .....	171
Budget Submission .....	171
Review and Approval Process .....	171
Description of Functionalities.....	172
Template .....	172
Budget Hierarchy .....	172
Budget Lines .....	173
Settlement Setup .....	173
Employee Setup.....	173
Employee Categories.....	173
Budget Types .....	174
Sum Budget .....	174

---

Main Budget .....	174
Employees Sub-Budget .....	175
Direct Costs Sub-Budget .....	175
Settlements Sub-Budget .....	176
Sub Budget .....	176
Line Types .....	176
Sum Lines .....	176
Manual Lines .....	177
Calculation Lines .....	177
Direct Cost Lines .....	177
Project Lines .....	177
Project Group Lines .....	178
Settlement Line Type .....	178
Internal Settlements Line Type .....	178
External Settlements Line Type .....	178
Employee Line Type .....	179
Salary Line Type .....	179
Revenue Line Type .....	179
Type Conversion Line Type .....	179
Distribution Types .....	180
Allocation Distribution Type .....	180
Surcharge Distribution Type .....	180
Add-Ons .....	182
Add-On 106 .....	182

## Overview

Welcome to the Deltek Maconomy Concepts guide. This document contains the following information:

- Introduction to each module
- Dimensions
- People Planner Integration (People Planner Admin Guide)
- Absence Management
- Approval Hierarchies
- Reporting
- Notifications
- Email Alerts
- Financial Budgeting

**Note:** This document will continue to evolve in future releases.

# Introduction to Modules

## Accounts Payable

The Accounts Payable module supports vendor-related work routines. Use this module to manage activities such as entering and maintaining vendor information, entering and approving vendor invoices, and creating and tracking purchase orders.

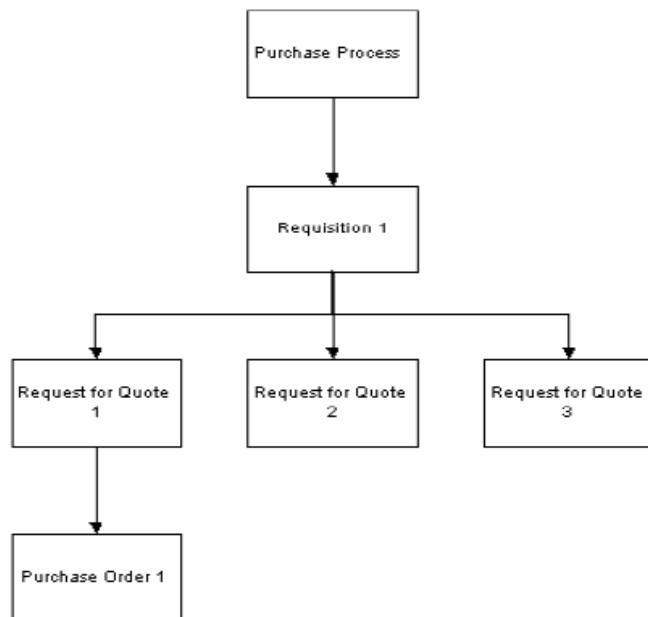
You can also generate aging reports, payment approval lists, vendor statements, and other reports.

## Purchase Processes

A purchase process is a common reference to all requisitions, requests for quote, and purchase orders related to the same purchase flow. Maconomy uses this concept to facilitate how you manage your purchases in the Portal. For example, a purchase flow for a job could consist of the following steps:

1. Create a requisition from a job budget.
2. From the requisition, create three requests for quote.
3. From one of the requests for quote, create a purchase order.

This could be illustrated as follows:



In this example, Maconomy creates a single purchase process and assigns the requisition to this process. It also indirectly assigns the requests for quote and the purchase order to the same purchase process.

Whenever you initiate new purchase flows, Maconomy automatically creates purchase processes and assigns the relevant information to them.

This concept is primarily used in the Purchase Management suite, where Maconomy provides you with an overview of the requisitions, requests for quote, and purchase orders created under each purchase process. You are able to easily see the history and status of your purchase flows, compare quotes, and plan your next steps.

Use the Request for Quote Overview workspace to view the requests for quote assigned to each purchase process. Use the Requisitions, Request for Quote, and Purchase Orders workspaces to see the purchase process number to which the current requisition, request for quote, or purchase order is assigned.

## Accounts Receivable

The Accounts Receivable module supports work routines related to customers and their payments. Use this module to manage activities such as entering and maintaining general customer information, payment terms, discount and credit agreements, and interest and reminder policies.

You can also reconcile open entries and generate aging reports, balance lists, account statements, and other customer reports.

## API

The API module encompasses the workspaces that are rarely opened directly in the Workspace Client, and are intended for use in other Maconomy processes. For example, the information and the actions can be used for building custom workflows in the Maconomy Portal using M-Script.

## Banking

The banking module is used for handling payments, customer payments, petty cash accounts, and bank reconciliations.

Maconomy's facilities for payment and customer payment are described in detail in the chapters "Introduction to Electronic Payment" and "Introduction to Electronic Customer Payment" in the following. Electronic payment and electronic customer payment are both add-on modules which must be purchased separately.

## Introduction to Electronic Payment

This introduction describes the usage of the payment module and the facilities it offers.

The section "Work Routines" describes the registration of vendor invoices, generation of payment selections, and posting of vendor journals. The work flow concerning approval of payment selections is dependent on whether the payment is manual, for example, by cash, electronic payment through a payment agent, or automatic payment by check. In the following, the latter two payment modes will be referred to as automatic payment when the description is relevant for both payment modes.

The section "Conventional Payment" describes the approval of conventional payments, whereas electronic payments are described in the section "Electronic Payment." In the section "Automatic Payment," the main focus is on the explanation of the part of the automatic payment flow handled by Maconomy. This corresponds to the flow which takes place in Maconomy when payment is done by check.

## Introduction to Electronic Customer Payment

This topic contains a description of the work processes supported by Maconomy's customer payment system and a description of the windows that make up the system.



## Manual Invoicing or Electronic Collection and Customer Payment Notification

If you use manual invoicing, and you receive a paper-based notification of customer payment from your payment agent, you will not be using any functionality in the customer payment module, as you will be working in windows that belong in other Maconomy modules.

The numbers in brackets refer to the numbers in the diagram above.

(1a) You receive information about customer payments as a notification from your payment agent, for example, a paper statement from your bank.

(2a) For every payment in the notification from your payment agent you manually create one or multiple general journals in the window General Journal in the G/L module. The information from the notification is entered in the general journal. The journal is then posted, and the customer payments have been registered.

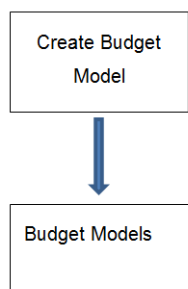
## Budget

Use the budget module for creating, inspecting, and maintaining budget models and for comparing budget figures with actual amounts from the G/L module.

You can use the budget module for creating an unlimited amount of budget models. Maconomy enables you to version budget models and project budget figures, thus forming a basis for new budget models.

You can combine budget models into budget groups. In this way, new budget entries apply to the other models in the budget group.

## Creating Budget Models



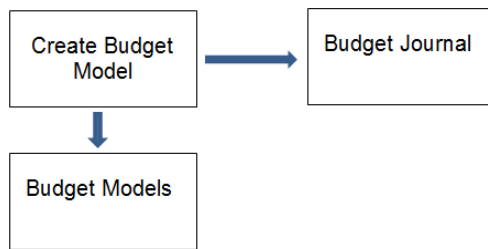
The first step is to create a budget model in either the window Budget Models or the window Create Budget Model. This is the top box in the illustration above. The model includes a name, fiscal year, and a price year.

Example:

The budget model is called "Budget 2000." The fiscal year is specified as 2000, the price year is specified as 1999. When budget entries are created in this budget model, the entries will then apply to the fiscal year of 2000 and be specified in 1999 prices.

You can create an unlimited number of budget models.

## Creating Budget Entries



The next step is to create budget entries in a budget model. First you enter journal lines in the window Budget Journal. On every line you specify an allocation combination of up to 12 dimensions and the amount or quantity of the entry. Maconomy enables you to budget with amounts or quantities in every window. Quantity budgeting is for instance used in industries that produce or process raw materials, such as in forestry, waterworks, and road construction.

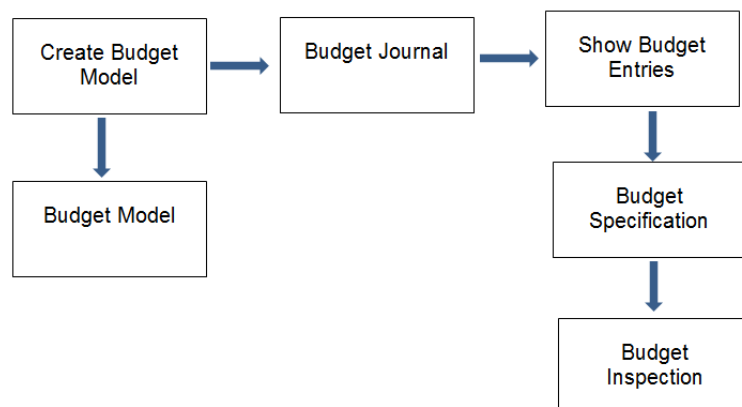
When the amounts (quantities) in the journal balance, the journal can be approved. When a budget journal is approved, the journal lines are converted to budget entries in the current budget model. You can create and approve an unlimited number of budget journals and budget journal lines, and consequently create an unlimited number of budget entries.

One budget entry is created for every journal line. When creating budget entries between two companies, Maconomy will further- more create entries on an intercompany account. When making an intercompany balance, the amounts are converted into the base currencies of the different companies. Conversion of currencies is always made on the basis of the exchange rate date January 1st in the fiscal year registered for the budgeting company.

If budget entries in a given budget model are created with the same allocation combination, they can be inspected both individually and as totals. This is described in the following:

## Displaying Budget Figures

The budget entries created can be seen in the windows Show Budget Entries and Budget Specification. Budget entries can be viewed as totals in the window Budget Inspection.



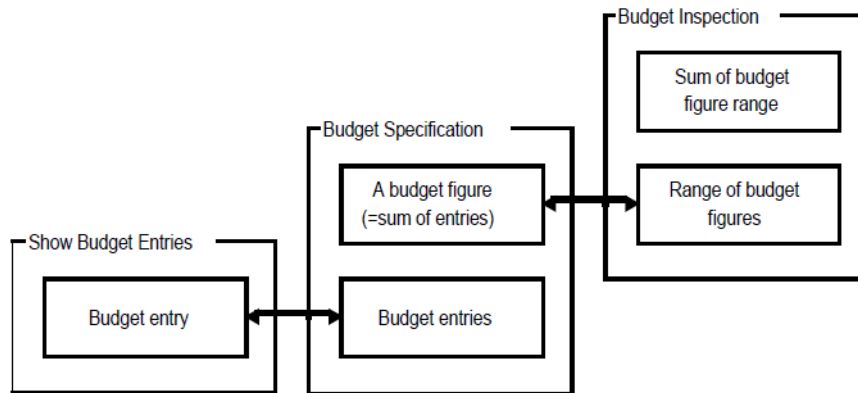
The window Show Budget Entries shows one budget entry at a time. In the window you can see information about allocation combination, amount (quantity), allocation and information about the origin of the entries.

The window Budget Specification displays all budget entries in the budget model with identical allocation combinations. Furthermore, the sum of these budget entries is shown so that you can see which budget entries have formed the budget figure for the allocation combination.

The window Budget Inspection also shows the sum of budget entries with identical allocation combinations for a specific budget model. In addition, you can display ranges of sum values for budget figures so you can get an aggregate budget figure for a range of allocation combinations.

Example 1: The bank account budget can be displayed if you enter a range in the Account No. dimension.

Example 2: The sum of budgeted salary expense for a given project can be displayed if you enter a range in the Project and Purpose dimensions.



The figure above shows the connection between the three displays windows described above. The Show Budget Entries displays one budget entry and its amount (quantity). Note that this is a card-only window.

The window Budget Specification displays a number of budget entries and the sum of these entries. These are called budget figures.

The window Budget Inspection shows a range of budget figures and the sum amount (quantity) of this range.

## Controlling Budget Figures

You can use the window Budget Control to compare budget figures with actual and committed amounts within a range of allocation combinations. In this way, you can continuously compare budget figures at different levels with actual and committed figures from each of the 12 periods in a budget year and for the year in total.

Below is a list of the amount types found in the window Budget.

Control:

Budget figures are budgeted figures created at the approval of budget journals. Budget figures can also be viewed in the windows Show Budget Entries, Budget Specification, and Budget Inspection.

Actual figures are costs and revenues posted in the G/L module.

Committed figures are future expenses not yet posted as actual figures but committed as your company has either accepted a specific quote from a vendor or planned a number of expenses. For example, if your company has accepted a quote for maintenance work, ordered the printing of brochures or entered a service contract which cannot be canceled within a given period, these expenses are all regarded as committed funds.

**Note:** For further information about committed funds, please see the section on commitment accounts below.

It is possible to have Maconomy check if an amount being committed will exceed the budget. This is done through commitment rules and commitment levels which define how narrow the commitment check should be.

**Note:** For further information about this check, please see the section on commitment accounts below.

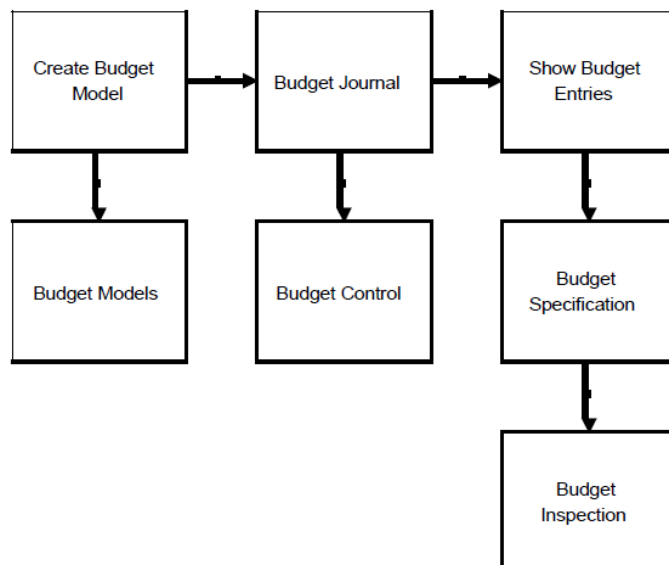
In the window Budget Control, you can see the budgeted amounts compared to the actual and committed amounts for each period. When posting a vendor invoice assigned to a purchase order or when manually closing a purchase order, the amount will no longer appear as committed in the window Budget Control. The amount posted as a result of the vendor invoice becomes an actual amount and will therefore be shown in the column "Actual" in the window Budget Control.

**Note:** Please see the description of the windows Purchase Orders and Vendor Invoices for a detailed description of committed amounts.



The model above shows the course of the stages in which an expense can be registered in Maconomy. An expense can also become an actual amount without first being budgeted or committed.

Only expenses are included in the calculation of committed amounts.



After adding Budget Control, the model of the basic budget work flow looks as in the figure above. Until now, the basic stages in a budgeting work flow have been described for a single budget model. The following section describes the handling of multiple budget models and a number of other important features of the budget module.

## Commitment Accounts

In Maconomy, you can use the commitment accounts to check if a given budget is kept when creating and approving purchase orders. Commitment control is made according to the parameters defined in the windows Commitment Levels and Commitment Rules.

Commitment Levels are used along with the window Purchase Orders in the A/P module. When a purchase order is approved, the amounts are transferred to the commitment accounts. When the amount is committed, it can be checked against the budgeted, actual, and previously committed amounts. This way, there is an automatic check ensuring that the budget is kept.

Each commitment level consists of a combination of dimensions against which you wish to check your purchase order amounts. The levels define the dimensions on which dimension control is to be made, for instance account number, company, and location.

As you may not want to check committed amounts in the same amount of detail throughout the chart of accounts, you can use the window Commitment Rules to specify the detail levels for different parts of the chart of accounts. This is done by assigning each commitment level to one or several commitment rules where you specify for each dimension the range of values which should determine the commitment level to be used when checking committed amounts against the budget.

Commitment Rules determine if committed amounts should be checked to see if the budget is exceeded as a consequence of the commitment. If automatic commitment control is used, you will thus not be able to approve a purchase order with a given allocation combination if the amount exceeds the budget for that allocation combination.

You can choose to check amounts against the budget for the beginning of the fiscal year to the posting date (Year to Date) or against the budget of the whole year (Year Total).

Example:

The following commitment levels are created:

Level	Company No.	Project
1	X	—
2	X	X

The following commitment rules are created:

Level	Location From	Location To
▪ 1	▪ 0	▪ 10
▪ 2	▪ 11	▪ 50

In this example, the set-up defines that commitment accounts should be kept for the Company dimension on commitment level 1, and for the dimensions Company No. and Project on commitment level 2. Next, automatic control of committed amounts is selected in the window Commitment Rules, and commitment levels 1 and 2 are inserted on different commitment rule lines in the table part of the window. It is specified that control should be made on level 1 for purchase order amounts regarding locations 0-10. Similarly, control should be made on level 2 for purchase order amounts regarding locations 11-50.

The following purchase order line is created:

Amount	Company No.	Location	Entity	Project
▪ 2000	▪ 12	▪ 8	▪ 0	▪ 5

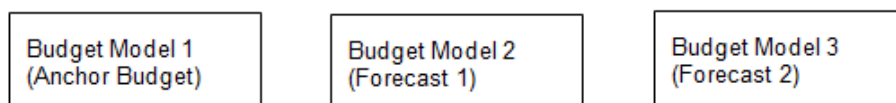
This purchase order line is checked against the commitment rules. The value in the Location dimension lies within the range of dimension values specified in the top commitment rule line, pointing out commitment level 1. For commitment level 1 it has been specified that amounts to be committed should be checked against the budget for the Company dimension only, and the 2000 units in the base currency of the current company is therefore checked against the amount budgeted for company 12 which is the company on the purchase order line.

If the 2000 USD is less than or equal to the amount left in the budget of company 12, the purchase order line will, in this case, be approved.

## Multiple Budget Models

In Maconomy you can create an infinite number of budget models. In the figure below three models are shown: an anchor budget and two forecast budgets.

There can be various reasons for creating multiple budget models, for example, the following:

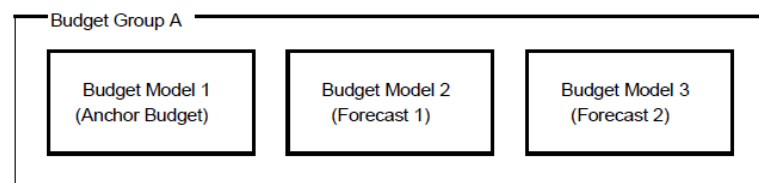


- You want to budget for a number of future years, where the budget model of the first year is called the anchor budget and the models of the subsequent years are called forecast bud- get 1, 2, 3, and so on. In this case, each budget model covers one year.
- You want to create several budgeting scenarios due to marked uncertainty regarding future expenditure, revenue, and so on.
- You want to create internal and external budget models where the external budget is for reporting to authorities, the board of directors, shareholders, and others with an economic interest in the company, and the internal is designed for internal control of finances and resources.

Further budget models are created in the windows Budget Models or Create Budget Model.

## Budget Groups

It is often useful to combine budget models into a budget group. A budget group consists of a number of budget models, for example, an anchor budget and several forecast budgets as in the example below.



The need for creating parallel budgets is a good reason to create a number of budget groups that function independently of each other. You can create an unlimited number of budget groups in Maconomy and attach an infinite number of budget models to them. Furthermore, a budget model can be attached to an unlimited number of budget groups.

If a number of budget models are attached to a given budget group, all members of a budget group are updated on the fly. That means that if you create budget entries in one budget model within the group, corresponding entries are automatically or manually created in the other budget models in the budget

group. This makes it easier to maintain associated budgets, such as the anchor and the forecast budgets of a company as displayed in the figure above.

## Multiple Companies

The budget module supports the multi-company model which makes it possible to create multiple companies within the same Maconomy system. In the multi-company model the individual company will appear as a dimension in Maconomy. Due to this it is possible to make separate budgets for every company. Private companies, enterprises and government agencies can use the same system for every attached company or institution. Please see the introduction to the G/L module for a description of the multi-company model.

## Reallocation

In Maconomy, you can budget on a general level, a detailed level or a combination of these. You can budget at a general level in order to budget at a detailed level at a later time, either because the budgeting responsibility is divided into central and decentralized levels in the organization or because you want to create a budget framework first.

Conversely, you can begin by budgeting at a high level of detail in order to do the general level later, for instance if the budget figures are taken from a decentralized to a central business unit.

Reallocation from for instance a general level to a detailed level is done by debiting (or crediting) the sum account with the amount (or quantity) with which the detailed accounts are credited (or debited).

You can also reallocate between companies in the same Maconomy system. If you do that, Maconomy creates entries on an intercompany account since budgeting and posting for another company is not permitted. Note that you cannot budget on a sum company.

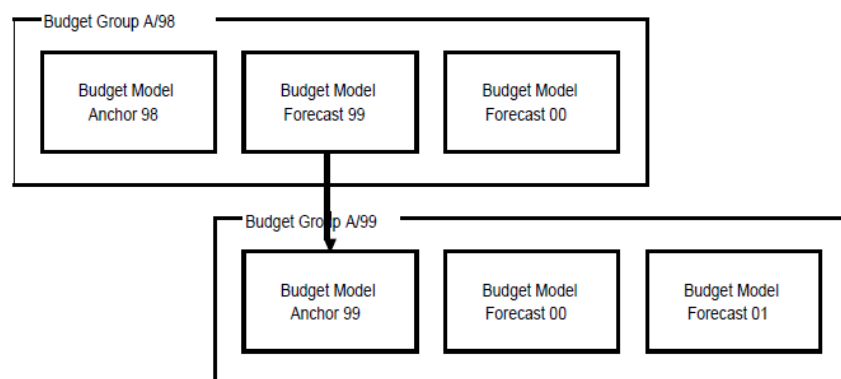
Example:

The Maconomy budget module is used in an enterprise with a parent company and subsidiaries, each of which is an independent legal unit. The parent company budgets a frame amount for salaries in one of the subsidiaries. The subsidiary itself distributes this frame amount on activities within the company.

Reallocation is performed in the budget journal. In order to preserve the audit trail, it is not possible to delete budget entries.

## Budget Copying

Copying a budget means creating a budget model from an existing budget model with an option of transferring the figures of the existing budget model and of performing a price projection on the figures. The figure below shows an example of budget copying.



Example:

A company budgets three years in advance. So they operate with three budget models called Anchor 98, Forecast 99, and Forecast 00. These are members of the same budget group, "A/98," as shown in the figure above.

When at a later time the company needs to create Anchor 99 and Forecast 00 and 01, Maconomy enables them to transfer budget figures for all allocation combinations from one budget model to another on its creation; in this case from Forecast 99 to Anchor 99. When rolling a budget, you can also ensure that the 1999 budget is displayed in 1999 prices.

The budget figures are price projected by means of a price register which defines annual percentage price changes within a price area. Each price area is valid within specific ranges of the 12-dimensional chart of accounts. By using price areas you can take the different price development of various budget items into account.

Now more budget models (Forecast 00 and Forecast 01) with 1999 as the price year can be created from the Anchor 1999 budget model and be included in a new budget group (budget group A/99). Forecast 00 in budget group A/99 can also be created from Forecast 00 in the A/98 budget group.

In order to implement the transferal of the budget figures you have to approve them in the budget journal. Here you can change the figures manually before committing them to the Anchor 99 budget model.

## Restructuring of Budget Models

When creating budget models on the basis of an existing budget model (budget copying), you might need to be able to do some flexible restructuring of the base budget on new dimension values in the new budget model. Restructuring means that all budget entries are copied from the existing budget model corresponding to the functionality in budget copying, but when restructuring, all the budget entries are given new dimension values in the new budget model. In this way, the budget figures can be reused and price projected, and at the same time be allocated on other accounts, locations, local specifications, and so on. When creating a new budget model, a new budget journal is automatically created for each company, and the allocated entries can be checked and revised before the journal is approved as normal. The new budget model to be created on the basis of an existing budget model is created in the window Create Budget Model, where you - contrary to creating a "normal" budget model - specify the dimension values that you want changed for all budget entries at budget model copying. At budget model copying, dimension values are derived in accordance with the system settings for dimension derivations in the G/L module. This means that when you specify a new dimension for the new budget model and a dimension derivation rule exists that causes derivation of one or more dimensions, the derived dimensions are copied to the new budget model. Such derivations correspond to the functionality of budget copying in the window Budget Journal.

If the new budget is price projected, this will be done according to the rules of restructuring of dimensions in the new budget. This results in a price projection based on the new allocation combinations.

**Note:** If you create a budget model on the basis of an existing budget model, and the base currency for the company specified on the existing budget model is different from the currency on the new budget model, the currency will be converted into the existing company's base currency.

Furthermore, it is possible to specify an entry description that will be copied automatically to the budget journals made at creation of a budget model on the basis of an existing budget model.



## Creating Budget Versions

In Maconomy, you can work with multiple versions of a budget. When creating budget entries, the entry is assigned the latest version number.

Using multiple versions can, for example, be useful if your budget evolves through several stages. The version number lets you track which version of the budget model, and thus at which stage of the budgeting process, a given budget entry is created. Versioning takes place in the window Budget Models.

Example:

- The first version corresponds to your first presentation of the budget to the management.
- The second version corresponds to your presentation of the revised budget to the management.
- The third version corresponds to your presentation of the revised budget to the board of directors.
- The fourth version corresponds to the approved budget.
- The fifth version corresponds to significant budget changes due to increased costs.

In this example you will be able to see which budget entries have been changed at the various stages of the approval of the budget.

## Budget Entry Accrual

In Maconomy, the fiscal year is divided into 12 periods so you can refer an entry to one or several periods. When you enter the budget journal, Maconomy will automatically allocate the entry amount on the 12 periods of the year unless you use an allocation key. This key can be a percentage allocation on all months or based on the allocation from a different budget model or an actual set of accounts. Allocation keys are created in the window Allocation Keys.

## Contact Management

The Contact Management is an add-on module to Maconomy.

The workspaces in this module are only available if you have acquired Maconomy's Contact Management add-on. However, the Contact Persons, Contact Group Types, and Contact Groups workspaces do not require that you have the Contact Management add-on.

Use the contact management module to enter and maintain information about potential and existing customers and entering information about contact with them. You can also enter isolated events and control complex work flows and campaigns aimed at selected target groups.

### Introduction

This introduction describes the basic principles behind the module Contact Management.

## Contact Companies and Contact Persons

Contact Companies are those companies and organizations with which you or your company wants to get in contact. Contact Companies can thus both include contact companies as well as existing customers. A contact company is usually a company while a contact person is usually an employee at a contact company to whom you direct your contacts. The contact management module makes it possible to register a wide number of information about your contact companies and persons. The module is integrated with the A/R module, and a customer can therefore also occur as a Contact Company.

## Events and Event Flows

An event is an activity made in connection with a contact company or person, for example, the dispatch of a letter, a phone call or a personal meeting. Events are used for registering any type of contact to contact companies and persons, for example, in connection with sales, marketing, support, and so on. Scheduled events, as well as events which have already been completed, can be registered with information characterizing the event, including the name of the employee who is responsible for carrying out the event. It is also possible to describe the event in an unlimited number of text lines.

Events can be assigned to event flows. An event flow is simply an entity (not to be confused with the Entity dimension) binding together a number of related events. For instance, you may have a number of events resulting from a given customer contact, for example, initial call, shipping sales material, personal meeting, and so on. By binding together all these events relating to the same case and the same customer, you get an overview and history of the events that have taken place in that context. Event flows offer summaries and statistics over, for example, total time spent on events in the event flow, the time at which the latest event took place, and date and time of next expected event.

Each event flow can be assigned a so-called event plan to allow automatic creation of events in the flow, based on the outcome of existing events. For more information on event plans, see the section Event Plans later in this introduction.

## Campaigns

Events can be assigned to a campaign via an event flow. A campaign can, for example, consist of the dispatch of a quotation to a number of potential customers chosen according to specific selection criteria. When a campaign is activated, Maconomy automatically creates an event flow for each contact company or customer in the target group of the campaign. An event flow type specified on the campaign transfers template information to each event flow created in the campaign, including an event plan which is used for the automatic creation of events in each flow. Based on the information registered about the company and person assigned to each event flow in the campaign, along with certain template information from the event plan, Maconomy then creates one or several events, depending on the event plan. The events are automatically assigned to the respective event flows, thus giving you an overview and history of the events related to each contact company/customer in the campaign, as well as the additional functionality of event flows.

It is possible to get an overview of events scheduled or already completed for each contact company or each employee. The window Overview per Employee can be used in connection with campaigns to give an overview of the events that an employee (for example, a sales representative) is expected to carry out in connection with a specific campaign.

## Event Plans

An event plan describes the events to be created as a result of the outcome of a previous event. In an event plan, you can, for example, specify that if the first call to a customer results in the customer accepting the invitation to a meeting, Maconomy should automatically create an event with certain information, whereas no further events should be created if the customer declines.

Event plans are used in connection with event flows for which you create a number of events, each of which will follow a separate course, which depends on the outcome of the individual event.

An event plan consists of a number of event templates, each of which is created on a line in the table part of the window Event Plans. For each event template, you can specify certain event related information such as event type, employee, description, and so on. You can also specify a date on which events created from the template in question are to be carried out.

On each event template, you also specify a condition determining when events are to be created from the template in question. In those cases when an event meets the condition of a given template in the event plan, Maconomy can create an event and transfer the information from the template. This is done using

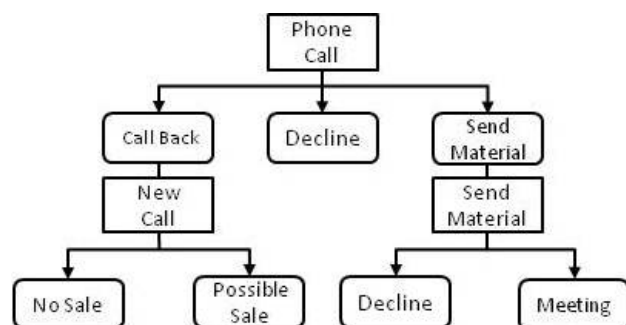
an action available in the windows Campaigns, Event Flows, and Events. The condition on an event template consists of the result of a previous event, for instance whether the customer answered yes or no to a given question in a phone conversation. The result of an event (and therefore also the condition on an event template) is specified using an option in an option list. For a further description of the set-up of conditions, please see the window Event Plans.

An event created as a result of the outcome of an existing event is called a secondary event.

In an event plan, you also create one or several templates for initial events. An initial event is an event created as the first step in a campaign, that is, an event created when the campaign is initiated.

Templates for initial events are created in exactly the same way as templates for secondary events, except for the fact that on initial event templates you do not enter a condition for the creation of events.

An event plan can have several levels, which can be practical if a secondary event can have different outcomes, each of which should result in further secondary events. This functionality is illustrated in the figure below, where the sharp-edged boxes represent events, whereas boxes with rounded edges represent possible results of the event above:



The following explanation of the illustration is based on a scenario with one event assigned to a campaign. However, the procedure described applies to all events in an event flow to which an event plan has been assigned.

In this example, the customer is first contacted by phone. This contact is represented by an event (created as an initial event, based on an event template in the event plan of the flow). In an option list, the following outcomes of the phone call have been set up: "Call back," "Decline," and "Send material." This option list has been assigned to the initial event, allowing the employee who contacts the customer to select one of these options, thus specifying the result of the event.

As two of these possible outcomes should result in further contact with the customer in different forms, the event plan also contains an event template for each of these two results. On one of these event templates, it has been specified that if the result of the first contact is "Call back," an event should be created from the event template. Similarly, it has been specified on the other event template that if the result of the first contact is "Send material," an event should be created using the information from this template.

## Opportunity Budgets Workspace

### Creating a Budget

Before you can enter information in the table part, you must create a budget for the current opportunity by selecting the desired template job and selecting the action "Create Budget."

The template job is the job whose budget should be copied to the opportunity. When you select a job in the island "Template Job," you can preview the budget of the selected job before creating the opportunity budget. As long as no budget has been created for the opportunity, you can preview the individual budget types of the template job by also selecting a budget type in the field "Show Budget." When you have

found a suitable template job and selected it, select the action "Create Budget." This will copy the selected template job's budgets of all types.

Once the budget has been created, you can start adjusting the budget copied from the template job. You can use the action "Copy Budget" in combination with the fields in the island "Copy" to copy lines from the budget of an existing job.

## Table Part Structure

The table part allows you to structure lines in multiple levels to create automatic subtotal lines and organize the budget into phases to optimize overview. Lines are structured using the toolbar just above the table part. For further information about the use of the toolbar and how to structure lines in a table part, see the section "Hierarchical Table Part Structure" in the chapter "Getting Started with the Java™ Client."

## Opportunity Budgets and Job Budgets

When you create an opportunity budget, Maconomy actually creates a job whose number corresponds to the number of the opportunity in question, prefixed by an underscore. In the Job Cost module, this job will be available in budget related windows. The information displayed in this window is the budget information assigned to the job created for the opportunity.

Since the opportunity budget is essentially a job budget, working with an opportunity budget is very similar to working with a job budget, and most of the functionality offered for regular job budgets is also offered in opportunity budgets. This means that you can work with opportunity budgets in the budget related windows of the Job Cost module, in the same way as when working with regular job budgets. This allows you to for example create job budget item lines, budget texts, and periodic forecasts (requires add-on 123: Portal Forecasting). However, you cannot enter quote and purchasing information.

Most of the fields in this window correspond to fields in the window Job Budgets, and their functionality is therefore not described in detail here.

## Converting Opportunities into Jobs

If the opportunity results in a win, you must create a job to be able to work out the actual job budget and enter cost, revenue and hours. The job created to be able to enter an opportunity budget (as described above) cannot be used for entering actual hours, cost and revenue. However, you can use the opportunity budget job as a basis for the actual job. This way, the actual job will inherit the opportunity budget figures, and the opportunity budget will remain intact, allowing you to run reports comparing the opportunity budget to the final budget and to actuals.

To create a job based on the opportunity budget job, go to the window Jobs, create a job and specify the opportunity number in the island Creation before pressing Return. When you press Return, information from the opportunity will be copied to the new job. For further information, see the description of the field "Opportunity No." in the island Creation in the window Jobs. If you are using the Maconomy Portal, it is possible to create a job from an opportunity by selecting the action "Convert to Job" in the Opportunities tab of the Opportunity component.

## EU Statistics

This module lets you extract the EU trade figures, which are to be reported to tax authorities when your annual trade within the union reaches the EU thresholds.

You can produce your reports on layouts that correspond to official EU forms or on diskette to both the EU Sales List System and Intrastat.

The sales list system is an instrument that the tax authorities in the member states use to control the settlement of tax on imports from other members. Companies who sell items to tax-registered customers in other EU member states must report these sales on a quarterly basis.

Intrastat is a set of statistics that show which types of items are sold within the EU. Companies who import and export for more than a given amount each year must report which items they have traded and in which countries.

This section includes:

- List System
- Intrastat
- Report Basis

(From the Introduction)

The introduction of the European Union has made it necessary to keep comprehensive records of trade within the Union. The old tariff documents have been replaced by a new statistics system.

This introduction describes in general terms the reports to the EU Sales List System and Intrastat. Detailed instructions are available at local tax offices.

## EU Purchase and Sale

The windows used in Maconomy for registering purchases and sales in the Item Purchase and Sales Orders modules have specific fields to denote EU trade. The Sales Orders window, for example, has a field which is marked for EU sales, which means the sale will be reported to the EU Sales List System and Intrastat.

Statistics to Tax Authorities	
EU Sale	<input type="checkbox"/>
Intrastat Reg.	<input type="checkbox"/>
EU Trade Type	Normal
Nature	Regular Purchase

Maconomy automatically marks the fields “EU Sale” and “Intrastat Reg.” if an order is being delivered to another EU country and is not subject to sales tax. However, it is a condition that the current country has been marked as being a member of EU in the field “Member of EU” in the window Countries. After it is invoiced, the sales amount and customer tax number are automatically included in the periodical report to the Sales List System, just as the CN code and item lines are reported to Intrastat.

The system works similarly for EU purchases entered in the Item Purchase Orders window. The item lines are included in the Intrastat statistics when the items are received in the Item Receipt window. The invoice for the items must be registered in the Vendor Invoices window with the tax code for EU acquisitions.

## CN Codes

The reports to the tax authorities must show items, countries, transport modes etc. using numerical codes. The codes are common for all of EU. The item code on the Intrastat form is thus an 8-digit code in the so-called Combined Nomenclature, which comprises around 10,000 items divided into 96 chapters. The nomenclature is available at local statistics offices.

Every item describes an 8-digit number, a text and sometimes a supplementary unit. The supplementary unit is used for specifying quantity when net weight is irrelevant or insufficient. CN code, description and

supplementary unit are entered in the window Item Information Card. Maconomy uses the supplementary unit as a conversion factor to the item's normal sales unit. If, for example, an item is sold in "batches" of 30, and the nomenclature states 1000 pieces as supplementary unit, a conversion factor of  $1000/30 = 33,33$  must be entered in the item's information card.

## EU Acquisition Tax

For item purchases from other EU countries, a given purchase tax is levied by the receiving country. The tax is thus not paid to the vendor but is credited an account for EU acquisition tax. The amount is debited the usual account for ingoing tax. The tax settlement shows the EU acquisition tax account as sales tax and is reconciled against the tax deductible part of the purchase tax originating from the EU purchase. See also the section on Tax Settlement in the chapter on the General Ledger.

## Triangulation

Triangulation is a type of EU trade in which an agent company in one EU country negotiates items from a vendor in a second EU country to a buyer in a third EU country. The items are delivered directly from the vendor to the end-customer, but the vendor invoices the agent, who in turn invoices the customer. For vendor and customer, the sale and purchase are treated as a normal EU trade, i.e. the vendor invoices without tax and the customer settles EU acquisition tax. The agent, on the other hand, does not settle acquisition tax and the sale to the customer must be entered in the sales list system reports with a particular code. In Maconomy, triangulation is indicated in the "EU Trade Type" field in sales and item purchase orders.

## Reports in Maconomy

The data written in each of the two types of report is taken from the Sales Orders module, in the form of invoices and credit notes, and from the Item Purchase module in the form of item receipts. The relevant information is extracted and stored every month in a report in the EU Statistics module. The report contains the same number of entries as in the statistics. Each entry is divided into the same number of lines as there are item lines in the invoices, credit memos and item purchase orders. These lines are not included in the report to the tax authorities, but they are a useful reference.

The sales list system reports contain an entry for each customer, identified by the customer's tax number. The reports are made for one company at a time, meaning that Maconomy only considers transactions for which the company in question is responsible when creating entries in a report.

The Intrastat report contains an entry for every combination of CN code, country, transaction type, and transport mode. The report is divided up into import and export declarations, which are made in separate forms. As in the case of sales list system reports, Intrastat reports are made for one company at a time, meaning that Maconomy only considers transactions for which the company in question is responsible when creating entries.

## Intrastat and Sales List System Reports

Reports to Intrastat and the Sales List System can be made either on paper or diskettes.

The correct layout for EU reports can be designed in Maconomy to save you from using the preprinted forms.

Alternatively, you can choose report your statistics on diskettes. Maconomy can create a file for each system in the data format used officially. The files are copied to a DOS formatted diskette, and are identified by the type of report (Sales List System or Intrastat), the tax region number and your company number.

## Fixed Assets

You use this module to manage company assets and to generate lists and reports used at the closing of the fiscal year.

The fixed assets module enables you to enter individual asset purchases. These are used to automatically calculate depreciation; you can manually enter improvements, write-ups, write-downs, and depreciations. You can also make asset sales and transfer assets to and from different asset groups.

### Introduction to the Fixed Assets Module

There are legal and practical reasons for registering assets in a separate system. The law has made it compulsory for companies to keep detailed accounts of fixed assets and depreciation. The various transactions that are made during the life of some assets have direct effect on the year-end result, which is why they must be properly documented. Therefore, entries regarding fixed assets should not be deleted until the asset is no longer in use and the audit documentation retention period has run out. By using the Fixed Assets module, you can keep structured, thorough control of your fixed assets.

Companies have a basic legal duty to register assets purchased for long-term usage. These assets are known as fixed assets, for which accounting laws set out precise and comprehensive rules for depreciation, write-ups, write-downs and other transactions.

Assets of similar character or purpose are sorted into asset groups. The law has defined various asset groups for the purpose of reporting year end results, but there are no legal hindrances for companies to categorize their assets in greater detail.

Once the assets are registered in the system, they are depreciated over a number of years, that is, the life span of an asset. Maconomy depreciates the assets automatically, whereas transactions, such as write-ups and write-downs, are entered manually. As long as the asset is not sold or otherwise cast off, its records are kept in the system, as required by law.

The law also requires full documentation of all transactions made in the life of an asset. The system keeps a record of every transaction made, and cannot delete these records before the legal requirement for documentation is relieved.

### Structure of the Fixed Assets Module

The structure of the information contained in the Fixed Assets module is divided into the following levels: At the top level are the asset groups, which represent assets of a similar character or purpose. At the second level are the actual assets assigned to an asset group. The third level contains the entries describing the transactions which have been carried out for the asset.

The asset groups have two purposes. One is to sort the financial transactions for the assets in the group; the other is to secure full integration to the general ledger. The grouping of the assets is required by law in some countries, since the total number of transactions represented in the group is used when accounts are closed at year end. Integration with the general ledger is secured by attaching each type of transaction to a separate G/L account.

All assets are associated with a company. Whether a given user can see a given asset depends on whether he has access to the company to which the asset belongs. This applies to both the asset information card and any entries regarding the asset in question. Please note that this access control model only applies if the standard access control configuration has not been changed in your Maconomy system. If it has, the access to assets may depend on other factors. For further information about the standard access control configuration, please see the section "Introduction to the Access Control System" in the Set-Up module.



In the window Users in the Set-Up module, you can attach a user to a company, and you can assign an access level to each company in the Company Information window in the G/L module.

## Documentation

A company must typically be able to document the life of an asset. This includes two types of documentation:

- Entries to the asset.
- Changes to the asset.

Maconomy prevents any asset entries from being deleted during the legal life time of the asset. The system also complies fully with the second requirement by securing automatic control of any changes in vital information about the assets. The following data is recorded:

- Time of the change.
- User responsible for the change.
- Name of the field changed.
- Value of the change.
- Value after the change.

Asset changes can be viewed in the window Asset History, in which a note can be entered for each change. This provides full documentation for all changes to the assets.

## Integration with the General Ledger

The Fixed Assets module is integrated with the General Ledger module, which implies that all amount transactions carried out for an asset are posted to the G/L accounts pointed to by the asset group and transaction type. This takes place during the posting of the asset journals, which are created by approving asset adjustments.

For every asset group, you must specify which G/L accounts are to be used when posting transactions for the asset members. You must also enter the text which the G/L entries are to carry. This makes it easy to manage which G/L accounts are used to the individual asset groups and asset transaction types.

## Asset Transaction Types

In the day-to-day administration, assets are the central concept and foundation for all transactions. When you purchase an asset on a long-term basis, you must register it in the Fixed Assets module. This is done in the Assets window, in which you can register a wide variety of information about the asset. A large part of the information is of non-financial character. The purpose of having the information is to secure proper documentation of the asset. The remainder of the information pertains to the life (depreciation period) of the asset, depreciation method, as well as residual value, and the non-depreciable part of the purchase price. The residual value is the amount to which you wish to depreciate the purchase price. The residual value can also be perceived as the price you expect to be able to sell the asset for, after the depreciation period is over.

The purchase price (cost) is registered by creating a transaction of the type Purchase. The purchase transaction is entered in the window Asset Adjustment in the same way as other manual transactions. This happens either if you enter a cost price when creating the asset, or it can happen subsequently, by making an asset adjustment after creating the asset.

Once the transaction is made, the only change that typically takes place for an asset is depreciation. Normally, the depreciation will be generated automatically, and this takes place in the window



**Depreciation Adjustment.** Here you enter the date you wish to start depreciating. Maconomy then creates a depreciation adjustment suggestion, which you can inspect and edit manually in the Asset Adjustment window. After you have finished editing the asset adjustment, you approve it. This updates the information attached to the asset. At the same time, Maconomy creates a posting journal of the type “Asset Journal,” which you must post in the G/L module.

Once in a while you may have to make extraordinary write-ups, write-downs, depreciation, and corrections to previous years’ depreciation. This is done in the Asset Adjustment window, in which you can create entries manually. An improvement in an asset will typically give occasion to a manual entry similar to a new purchase.

There are four types of transactions which cannot be selected manually in the Asset Adjustment window. These are the types Sale, Internal Sale, Relocation, and Transfer. These types of transaction are created in the window “Asset Disposal.”

## Asset Sale

Selling an asset normally involves several accounting transactions. When an asset (all or part of it) is sold at a given price, the law requires that the parts which are sold are reversed. This means that a sale results in one entry of each transaction type. It is also required that a gain or loss made from an asset sale is registered separately. When a sale is approved in the Asset Disposal window, Maconomy creates a new asset adjustment containing all the calculated entries. These entries are of the sub-type called “Sale,” and cannot be edited or deleted in the Asset Adjustment window. If you do not want the sale to go through, you must delete the whole asset adjustment.

## Transfer to New Group

The law also requires that the transfer of an asset to another group takes place by transferring all the data for the asset to a new asset, which is member of the new asset group.

The transfer of an asset from one group to another requires, in the same way as the sale, that the sum of all the transactions for the asset is reversed to the original asset. The totals are entered as opening entries to the new asset. When the transfer is approved, Maconomy creates the new asset automatically. Maconomy also creates an asset adjustment with an entry for every transaction type used for the old asset. All the entries are of the “Transfer” sub-type, and cannot be edited or deleted in the Asset Adjustment window. If you do not want the transfer to go through, you must delete the whole asset adjustment.

## Asset Relocation/Internal Sale

If you wish to change the physical location of one or more assets in the company, or if you wish to sell assets to another department in the company or a subsidiary, when such a company is considered as a separate legal entity, you might wish to do so by relocating/selling the current assets internally. The physical location of an asset is changed by redefining the dimension and user information of the asset including the company association of the asset. Asset relocation transfer and sale is done in the window Asset Relocation.

If an asset is internally relocated, the user information and the dimension values of the asset are changed according to the specifications made by the user. However, this does not mean that a new asset is created, but only that the company association of the asset and other dimension values are redefined; the remaining standard information remains unchanged. When relocating assets between two companies, the necessary inter-company balances are created in the G/L module, unless the system parameter “Create intercompany entries for companies with same parent company” is not marked, and the two companies involved are both assigned to the same parent company.

As the asset changes are registered and the necessary G/L entries are made, Maconomy creates an asset adjustment of the type "Relocation," which is automatically approved. The approved asset adjustments are displayed in the window Asset Adjustment. When approving an asset adjustment, Maconomy also creates a posting journal of the type "Asset Journal," which is then posted in the G/L module.

If an asset is sold internally, the asset is removed from the company selling it, and a new asset is created in the company to which the asset is sold. The new asset will be treated like an acquisition, and its sales price will be the book value registered at the time of sale. The company selling the asset has to ensure that possible depreciations are made before the sale is completed. The company buying the asset will take over the depreciation period as well as the depreciation method from the company selling the asset.

At the same time, an asset adjustment is created and automatically approved. The entries in such asset adjustments are of the type "Internal sale." The approved asset adjustments are displayed in the window Asset Adjustment. Furthermore, Maconomy creates an asset journal to be posted in the window Posting in the G/L module.

## Format Specification

This module enables you to create and edit formats which can be used for import and export of data, e.g. as payment formats for payments and customer payments.

A payment format is used in connection with the Banking module in Maconomy. For more information about setting up payment modes, payment agents, and so on, please refer to the description of the Banking module.

Using import and export formats, financial data from Maconomy can be imported from a file of a certain format or exported to other systems in a given format.

The Format Specification module is used for creating formats. A format is a specification of the content of a file.

Formats are, for example, used in the following cases:

- When you create a file with payment requests for your bank.
- When you receive a file from your bank containing information about payments into your accounts.
- If you need to export financial data from your Maconomy system to be used in another system from another vendor.
- If you need to import financial data into Maconomy, for example, from a system from another vendor.

What all these examples have in common is that Maconomy is not in control of the nature or structure of the ex- or imported data. That means the sequence of data, how you indicate that data belong to the same field in the database, how you specify a new record in the database, and so on. In example 1 above, your bank dictates the structure of the format. If you are using two different banks, they are probably using different formats.

For this reason, it is important to be able to control very precisely how data are exported from or imported into Maconomy. This is done by creating a format.

Usually a format has a certain structure. The structure is specified using record types. The format will consist of a record specifying the beginning of the file. After this follows a record which specifies the beginning of a section in the format and which specifies common information about the following set of data records. Several sections can follow before the file is concluded with a record specifying that the file is ended. This sequence can be represented like this for a payment format:

```
FileStartRecord
```

```
SectorStartRecord
PaymentRecord
SectorEndRecord
FileEndRecord
```

It can also be expressed in the following way:

```
FileStartRecord, (SectorStartRecord, PaymentRecord+, SectorEndRecord)+, FileEndRecord
```

When the structure is created, the individual elements in the structure are adapted from the guidelines issued by, for example, the bank for which you want to create a payment format. According to this you specify the content of the start record (for example, information about your company, your accounts, and so on), the various sectors (for example, which data should be transferred about a single supplier), and the payment records (which data should be transferred about each payment entry pertaining to the vendor in question). Furthermore, the end record is defined, which may, for example, contain the total number of payment entries contained in the file.

Then the format is saved as a file on disk. This file can then be imported into Maconomy using an import program and used as a payment format in the Banking module.

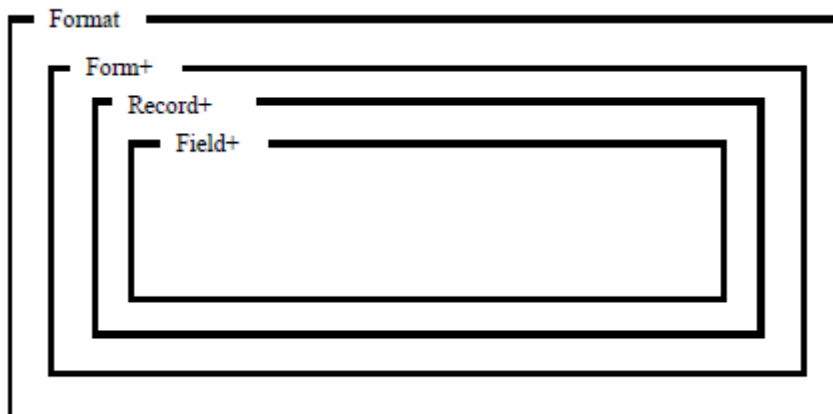
Certain payment formats do not contain the structure mentioned. Instead, only payment records are used, repeating all information about your company and the suppliers (like this: PaymentRecord+).

When the payment format (for example) has been imported into Maconomy, and the correct setup has been applied, a file can be created which contains the payments your company wants to perform. This file is sent to the bank, which can then execute the desired payments because the bank's systems are able to read and interpret the file you sent.

## Formats, Forms, Records, and Fields

When working with format specifications, it is important to understand the difference between formats, forms, records, and fields.

The structure of a format can be illustrated in this way:



A format is a description of Maconomy's interface with another system, for example, the financial system of a bank. The format can contain several forms; for example, the format with an interface to the Girobank systems can contain the payment forms "Common," "Giro to Bank," "Giro to Bank with Remittance Lines," and so on.

Further, the forms contain a number of records. A record can be of various types: File Start, File End, Section Start, Section End, or Payment. The different record types can either signal the start or end of a

payment file, specify that a section within the payment file is starting or ending, or specify that the current record contains a payment entry.

Each record can contain a number of fields. The fields contain the units of data from Maconomy, for example, the name of a vendor, an amount or other. The field also contains information about the way it should be written to the file (for example, left-aligned and with modulus control).

Furthermore, records can be collected into groups or sections. A payment file can, for example, contain information about payments to many vendors, where all payments to the same vendor are grouped in a sector.

## Application in the Banking Module

Payment and Customer Payment formats are used in Maconomy's Banking module. When a payment format is imported into Maconomy, it can be selected for each payment agent in the island Payment Control or Customer Payment Control in the window Payment Agents. A link to the payment agent (and the format assigned to it) can be established in the field "Payment Agent" in the window Payment Modes or the window Customer Payment Modes. At the same time, it is possible to select a payment form or customer payment form, corresponding to the forms created in this module for each format.

For every vendor and customer you can now select a payment mode. Payment or customer collection files created in the windows Payment Selection and Collection Selection will be created according to the format and form selected for each payment mode or customer payment mode.

For more information about setting up and creating payment and collection files in the Banking module, please see the description of the Banking module.

## Application in the G/L Module

Import and export formats are used in Maconomy's G/L module. When a format has been imported into Maconomy, it can be selected for every data agent in the window Data Agents, in the islands Import Control and Export Control, respectively.

When data is to be imported, the data agent (and the associated format) is selected in the window Import Data. At the same time, an import mode is selected. The import mode, which is defined in the window Import Modes, points to an import form, which corresponds to the forms created in this module for each format.

When data is to be exported, the data agent is selected in the window Export Data. This automatically selects the conversion group associated with the data agent. The conversion group defines which data are to be exported and also how they should be exported (using conversion rules). On each conversion rule, you can point out an export form in the window Conversion Rules.

**Note:** For more information about setting up and creating import and export files in the G/L module, please refer to the description of the Data Exchange module in the G/L module reference manual.

## General Ledger

This chapter describes Maconomy's General Ledger (G/L) module. You use the G/L module to create and maintain a number of essential facilities in Maconomy, including the twelve-dimensional chart of accounts and multiple companies in the same system. You also use the G/L module to enter general journals, posting, and tax reporting, and for calculating year-end results. You can print various G/L records, including account ledgers, balance sheets, and posting journals. Maconomy processes all of the transactions in the G/L module in the currency that you specified as the enterprise currency in the System Information workspace.

You can build up Maconomy's chart of accounts with up to twelve dimensions, out of which three are specific to each company in the multi-company model. This ensures flexibility in the chart of accounts and flexible and detailed reporting options. It is up to your company to decide whether to use all or just some of the twelve dimensions.

Maconomy's multi-company model supports the decentralization of the work processes of a company. You can create departments or subsidiaries in an organization as independent companies, and Maconomy performs intercompany balances automatically. The multi-company model is fully integrated with Maconomy's access control system.

## Multiple Currencies

A general journal line can contain amounts in different currencies. Maconomy converts these amounts automatically, using the exchange rate that is valid on the posting date.

If the entry is a customer entry, Maconomy uses the exchange rate table for sales.

If the entry is a vendor entry, Maconomy uses the exchange rate table for purchases

If the entry is a G/L entry, Maconomy uses:

- The exchange rate table for purchases if the balance on the specified account is zero or in debit.
- The exchange rate table for sales if the balance on the specified account is in credit.

If the entry is a job entry—the **Job No.** field in the Entries sub-tab has a value—and the **Account No.** field does not have a value, Maconomy checks whether fixed exchange rate information has been specified for the job in the Job Price Information workspace in the Job Cost module.

If this is the case, and you did not enable the **Fixed exchange rates in budgets only** system parameter, Maconomy converts the currency according to the fixed exchange rate information specified in the Job Price Information workspace.

If the entry is a job entry with fixed exchange rates, Maconomy uses the specified exchange rate for the job.

When working with multiple currencies, exchange rate variances may occur. Maconomy creates separate posts for the following:

- Invoice
- Payment
- Exchange Gain or Loss
- Balancing entry

### Example

In this example, a company posts a customer invoice in Maconomy using Danish Krone (DKK) as the job currency, Euros (EUR) as the base currency, and US Dollars (USD) as the enterprise currency.

The invoice is posted on January 5 with a total billing price of DKK 100.00. Maconomy converts this amount into EUR and USD.

Date		Job Currency (DKK)	Base Currency (EUR)	Enterprise Currency (USD)
01.05	Invoice on account printed	100.00	17.00	20.00

On January 10, the customer pays the amount stated on the invoice. Maconomy posts a new G/L entry registering the payment, and automatically converts the amount according to the exchange rate on this date.

Date		Job Currency (DKK)	Base Currency (EUR)	Enterprise Currency (USD)
01.05	Invoice on account printed	100.00	17.00	20.00
01.10	Customer Payment	100.00	16.50	20.25

Because the exchange rate varies between the date of posting of invoice and payment, the company has an exchange rate loss in the base currency, and a gain in enterprise currency. Maconomy posts an entry to show a loss in base currency. A balancing entry is also created to track the exchange rate gain in enterprise currency.

Balancing entries are created by Maconomy when you have opposite exchange rate variances in base and enterprise currency. When the invoice is reconciled, the balancing entry provides a figure which does not currently add up to the total amount. In this example, because exchange rate fluctuations caused different variances in base and enterprise currencies, the balancing entry provides the difference in enterprise currency. When you sum up the amounts in all postings (payment, exchange rate loss, balancing entry), you get an accurate figure that is similar to the amount provided in the first posting (invoice).

Date		Job Currency (DKK)	Base Currency (EUR)	Enterprise Currency (USD)
01.05	Invoice on account printed	100.00	17.00	20.00
01.10	Customer Payment	100.00	16.50	20.25
	Exchange Rate Loss	0.00	0.50	0.66
	Balancing Entry	0.00	0.00	-0.91

Similarly, when you post vendor invoices and send payment on a later date, Maconomy automatically creates entries as stated in the example.

When working with multiple currencies on a job that uses a fixed exchange rate (either on the job itself or specific invoices on account on the job), Maconomy creates entries for exchange rate variances that occur due to the fixed exchange rate, and the exchange rate fluctuations that occur between the date of posting invoices and the date of payment.

When invoice on allocation is posted on the job, an entry is created as an unrealized exchange rate gain or loss. When the vendor entry is posted, the amount is recognized as realized exchange rate gain or loss and is moved to the account assigned for realized exchange rate variance.

## Human Resources

This section describes the Human Resource module. The module is an add-on to Standard Maconomy.

The HR module supports the HR related functions within your company. For instance, you can store various information about the employment terms of each employee, including compensation, stock option plans, and position history. Furthermore, recruitments can be planned and managed using the facilities in the HR module, making it possible to maintain well-structured, documented hiring processes.

## Inventory

Items in Maconomy are classified into groups, at which level most of the related information is maintained.

Here you assign items to warehouses, make price lists (optionally in various currencies), define discount levels, and create item-related discount agreements. The Sales Orders module uses all of this information.

If you have Maconomy Bill of Materials, you can create Bills of Materials (BOMs) in this module. These are then sold in the Sales Orders module, where prices and inventory control are processed in the same way as for standard items. You can create BOMs in an unlimited number of levels.

## Item Purchase

Use this module to create and maintain item purchase orders for your vendors. Maconomy applies any relevant vendor information from the Accounts Payable module.

When you receive item deliveries, you can enter the receipt on the basis of the item purchase order made for the shipment. You can purchase items in a unit other than that used for sales and inventory control, in which case Maconomy ensures a correct conversion when the items are received.

Maconomy can create automatic item purchase selections on the basis of the current inventory, reorder level, and maximum inventory of your items. You can also create an item purchase order from a sales order.

## Job Cost

The Job Cost module enables you to manage and account for jobs and project-oriented work.

Using this module you can create budgets; record usage of time, sale of goods, and other job costs; and invoice customers on the basis of these records. In addition to this, you can generate reports on jobs, employees, profitability, and so on.

## Creation Section

### Creating a Job

Each new job must have a unique number. In this context, a number does not necessary have to consist of digits, but can be any text. If you do not specify a job number when you create the job, Maconomy will name the job for you according to a list of sequential numbers.

#### Admin Note: Created as Order or Quote

Jobs are always created in quote status, indicating that the job is a quote to the customer, and not yet an order from the customer. However, in the window System Information in the Set-Up module you can specify that jobs must be “Created as Order” and not as a quote. If this is the case, Maconomy converts the job to Order status immediately after creation. Maconomy verifies that the current user is permitted to convert jobs from quotes to orders. This permission is specified per user in the window Actions in the Set-Up module.



You must also specify the number of a customer for whom the job is being performed here. Maconomy verifies that this customer exists and is not blocked, and verifies that the customer's credit limit has not been exceeded – in which case a warning is displayed. You can change the customer of an existing job, provided you have not invoiced the previous customer yet for the job.

Maconomy retrieves various pieces of information from the Customer Information Card in the Accounts Receivable module and suggests it in corresponding fields in this window and in the windows Job Information and Job Price Information. You can change most of the information.

You can easily create a job with similar specifications to another job by copying an existing job in the island Copy Job. For easy job creation see also the section “Template jobs” below.

### Admin Note: Job Parameters

When you have entered a job number, a customer number and other relevant information on the job in question and press Return, Maconomy also derives the relevant job parameters. The relevant job parameters are selected in accordance with the job parameter selection rules created in the window Job Parameter Selection Rules. The values derived to a job can be inspected and changed in the window Job Parameter Selection. See the description of the field “Attribute Name” in the table part of the window Job Parameters for a detailed description of the available job parameters and their associated values.

The job parameters assigned to a job can be re-derived manually in the window Job Parameter Selection. However, Maconomy may re-derive job parameters automatically:

1. If the field “Always Derive Job Parameters” in the window Job Parameter Derivation Fields is marked, Maconomy re-derives job parameters automatically whenever any change is made to a job (for example, if the job name is changed).
2. If the field “Always Derive Job Parameters” in the window Job Parameter Derivation Fields is not marked, Maconomy will rederive job parameters when any of the job setup fields listed in the table part of the window mentioned is changed.
3. If the field “Always Derive Job Parameters” in the window Job Parameter Derivation Fields is not marked and no fields are listed in the table part, job parameters must be re-derived manually in the window Job Parameter Selection if it is necessary.  
There are two reasons for not wanting Maconomy to re-derive job parameters whenever the job changes. Firstly, the process of job parameter re-derivation has a certain impact on performance, so it is beneficial to limit the amount of re-derivation. Secondly, you achieve more control over your job by specifying explicitly which job fields should initiate the re-derivation of job parameters the parameters do not get changed by accident.

As changes on a job might imply that the job parameters previously used on the job are no longer considered valid for that job, the job parameters used on the job are changed by Maconomy in accordance with the priorities and selection criterion specifications specified on the relevant job parameter selection rules created in the window Job Parameter Selection Rules.

See the descriptions of the windows Job Parameters, Job Parameter Selection Rules, and Job Parameter Derivation Fields for more information about how job parameters are assigned to a given job.

## Template Jobs

A job can also be created on the basis of a template job. When you wish to create a job on the basis of a template, you can use one of the following two methods:

1. During the creation of a job, you can mark the field “Create From Template” in the island Creation, and enter values in a number of the fields in this window. If the values entered on the new job uniquely identify a template job, all remaining values (job budget lines, job parameters, job price information, and so on) will be copied from this template to the new job when you press Return. If no unique template can be found, for instance if the values you entered on the new job



cannot uniquely identify a template, Maconomy issues a message informing you that no template could be found. In this connection, you should note that a large number of the fields in this window can be used for identifying a certain template. However, this has not been specified explicitly for each of the fields in the field descriptions below.

2. The other method for using a template job is to specify a template job in the field "Template Job No." in the island Creation and have the job created on the basis of this template when you press Return.

### Admin Note: Create from Template

A system parameter ("Create jobs from templates") specifies if new jobs should be created on the basis of template jobs. However, you can overrule the setting of the system parameter for individual jobs by manually marking or unmarking the field "Create From Template" in this window.

### Admin Note: Specifying that a Job Is a Template Job

A template job is identified as such by marking the field "Template" in the island Job on the job in question. When a job is marked as a template job, it is neither possible to register entries nor to perform invoicing from it, as it should be used as the basis for creating jobs only. Any job can be marked as a template job as long as no registrations have been made on the job.

On a template job, you do not have to enter values in all fields. For example, the "Customer No." and "Invoice Layout" fields, which are usually mandatory, can be left blank. Moreover, you can assign job parameters, job budgets, job descriptions, task lists and so on to a template job. This allows you to enter only those values on a template job that you want to be transferred to new jobs created on the basis of the template job in question. Note that an entire job hierarchy consisting of a main job and a number of subjobs cannot be marked as a template job by simply marking the main job as a template. Instead, all the relevant jobs must be marked one at a time. See the description of the island Creation for further information about the use of template jobs.

## Job Groups

Every job belongs in one job group. A job group provides a clear division of posting references and allows you to generate useful reports. Job groups must be created in the window Job Groups before jobs can be assigned to them.

## Actions in this Window

When a job is no longer used, it is closed, and Maconomy automatically generates an end invoice. Once a job has been closed, no further registrations can be made on the job. However, you can reopen a job for registration by selecting the action "Reopen Job."

## Changing Customers

After creating the job, you can still change the customer up until you invoice the job. If you change the customer, the bill-to customer is changed to the new customer's bill-to customer, also if the bill-to customer has previously been changed manually. If the new customer's currency is different from the old, and you have made entries on the job, Maconomy will continue to use the old customer's currency.

### Admin Note: Customer-Specific Information

If the system parameter "Aut. company specific customer creation" has been marked in the Set-Up module, the current customer is created as a company specific customer for the company responsible for the job (if it does not already exist). If this parameter has not been marked, the customer has to be created as a company specific customer in the window Company Specific Customer Information Card before jobs can be created with the current combination of customer and company.

## Registering Time

The time you spend should be registered on a combination of job, activity, and usually task.

- The job represents your agreement with the customer, and is the link between your registration and the customer. A job can be internal, meaning that the time you register on it is not billed to a customer.
- The activity is the link between the Job Cost module and the General Ledger. By specifying an activity, you tell Maconomy how to post your registration in the G/L module. Each activity has a number of posting references associated with it in the window Activities. Activities are further divided into time and amount activities. Amount activities are used for registering expenses on a job other than time, for example photocopies, office supplies, or taxi rides. If the system parameter "Disallow reg. on amount act. in time sheets" is set, you cannot register on amount activities in this window, but must use the window Expense Sheets. The activity is often derived from the task.
- The task constitutes an additional reporting level and helps build a workflow into the execution of a job. If you use a work breakdown structure (see the window Job Budgets), tasks are also used for dividing jobs into groups of related or interdependent tasks. Selecting the action "Require Tasks" in the window Job Tasks makes tasks mandatory in this window.

Instead of specifying these items separately, you may be able to select a favorite, which is a shortcut to specifying everything at the same time. For more information about favorites, see the description of the window Favorites.

These items (job, activity, and usually task) are required when you later submit the time sheet. However, if the system parameter "Allow Incomplete Time Registrations" is not set, the required items must be specified on each line before you can press Return to save the line. See also the description of the window SpeedSheet.

Apart from these required items, you can specify:

- Additional dimensions, but these are usually completed by Maconomy.
- Notes and descriptions regarding your time entry.
- Estimates to completion if you use job progress estimates.
- A description per day, if the tasks you register on require a daily description.

All of these things are specified in the sub-tab.

The main tab is used for displaying details about the current time sheet, including sums and time sheet status — that is, if the current time sheet has been submitted, transferred, approved, or reopened.

To use the time sheet as a regular employee (see also "Access Control" below), you need to make sure that you see your time sheet for the current week. When you create a time sheet, enter the desired week number in the field "Week" before pressing Return. Maconomy will then create a time sheet for your employee number for the week in question. Only one time sheet per week and employee can exist.

If you mark the field "Keep Line" in the sub-tab for certain time sheet lines, these lines will be copied to new time sheets when you create them, but without any time entered. They will automatically be copied to all new time sheets until you remove the mark from the field "Keep Line" on the lines in question.

## Specifying Time

The following applies if you are using the Maconomy client for Java™. When you enter the number of hours you have been working on a given task into the time sheet, Maconomy interprets your input as hours and minutes. For instance, if you work on a project for 1 hour and 45 minutes, you can enter "1:45"

or simply "1 45" (notice the space) into the time sheet. However, if you work on a project for one-and-a-half hours, you can enter "1.5," and Maconomy will then convert this to "1:30" when you press Return.

You can control how Maconomy should interpret your input into hour entry fields in the window Preferences. You can open this window by right-clicking this window. The field "Interpret hour entry as minutes when above" specifies the cut-off number used by Maconomy to determine if your entry is stated in minutes or in hours. For example, if the value is "10," Maconomy interprets your time input in the following way:

Your Input	Interpreted as	Result
5	5 hours	5:00
10	10 hours	10:00
11	11 minutes	0:11
2.5	2 1/2 hours	2:30
2 05	2 hours and 5 minutes	2:05
245	245 minutes — that is, 4 hours and 5 minutes	4:05

Note that for this to work, the **Disallow reg. on amount act. in time sheets** system parameter must be enabled. If registration on amount activities were allowed, Maconomy would not know whether to format the input as hours or as a regular quantity.

Note also that the above assumes that you are using ":" as the time separator (selected in the field "Time format" in the window Preferences).

## Miscellaneous Details Concerning Time Entry

- Be aware that your time sheet entry can be rejected if it is not a legal combination of activity, dimensions, and task as specified in the window Job Allocation Combinations.
- If a date has been specified in the field "Work Completed On" in the window Jobs for the job on which you wish to register entries, it will not be possible to make time sheet entries on that job after the date specified, unless you are the project manager of the job in question. See the description of the field "Work Completed On" in the window Jobs for further information.
- If employee control has been selected for a job in the window Jobs, Employee Control, or Job Tasks, you can only enter registrations on the job in question if you either appear in the job's budget of a certain type or are listed in the job's employee control list. For more information, please see the description of the field "Employee Control" in the window Jobs. However, employees who have been selected in the detailed resource plan for a job in the window Detailed Planning in the Resource Management module can always make registrations on the job, irrespective of any employee control on the job.
- If you use detailed planning, you can choose to have Maconomy automatically create time sheet lines based on the detailed planning at the creation of time sheets, and you can choose whether these time sheet lines should be pre-filled by period or by day. This is done by specifying values in the job parameter "Pre-fill Time Sheet Lines" in the job parameter type "Planning" assigned to a job. If this parameter is used, and a time sheet is created for a week, Maconomy checks whether the detailed planning contains any confirmed allocations of the current employee for the week in question. If this is the case, Maconomy creates a number of time sheet lines that

correspond to the detailed planning lines for the week. In other words, for all the planning lines specifying that the employee in question will be working on a specific task, the system will create a corresponding time sheet line. If lines are added to the detailed plan after the time sheet has been created, you can select the action "Transfer Plan" to update the time sheet with the lines added to the plan. For more information, please see the description of the action "Transfer Plan."

- On time sheet lines on which time activities have been specified, you can enter an estimate of the time you believe is required to complete the task in question, if it is assigned to a job set up to use estimated time to completion. You can also choose to mark the task on a time sheet line as completed, if you believe that your part of the work on the task is finished. If you specify an estimate, your project manager can see and use your estimate to update the planning budget and re-estimate the future resource requirements for the task.

## Time Sheet Workflow

The life cycle of a time sheet is as follows: After creating the time sheet, you make your registrations for the relevant days in the week.

When you are done for that week, you submit the time sheet. If you want to submit it before you are completely done with it (for instance, to be able to invoice a certain job more quickly or in connection with a month-end report), you can submit it temporarily by selecting the action "Submit Temp. Time Sheet." When you do that, the registered entries can be released and posted, but the time sheet cannot yet be approved. You can therefore keep registering hours on the time sheet until you submit it (finally) by selecting the action "Submit Time Sheet."

Next, the time sheet must be approved according to the approval principle selected in the window Jobs for each of the jobs affected by the time sheet. See the section "Approval" below. When the time sheet lines are approved, they are also transferred for posting (for more information about this and about releasing the time sheet, see the section "Posting time sheet entries" below).

When the time sheet has been approved, it can be reopened for editing, and you can edit existing registrations and create lines. However, it is not possible to edit job numbers, activity numbers, tasks, or other dimensions on existing lines if they have been transferred for posting, and you cannot delete them.

See the section "Posting time sheet entries" below for more information about how and when your registrations are posted.

## Approval

For every job, an approval principle is specified. This means that depending on the jobs you register on, your time sheet must either be approved as a whole by your supervisor (or other person with access to doing this), or line-by-line by the project manager of each job in the window Approve Time Sheet Lines, or by a combination of the two. However, lines pertaining to jobs for which you are the project manager automatically receive project manager approval when you submit the time sheet, provided that project manager approval is optional or required, and the job parameter "Automatically approve Project Manager's Time Sheet Lines" has been set to "Yes" for the jobs in question. Furthermore, if your supervisor has approved the time sheet as a whole, the time sheet is marked as approved, and any lines that are subsequently rejected by a project manager are handled as reopened time sheet lines. For more information, see the description of the windows Jobs and Approve Time Sheet Lines.

## Posting Time Sheet Entries

When a time sheet is submitted, submitted temporarily, released, or approved, it is evaluated for posting. This means that Maconomy evaluates each time sheet line to see if it can be transferred for posting. The lines that can be transferred to posting are entered into a time sheet journal, and the time sheet journal will then be posted:

- If the system parameter "Automatic posting of time sheets" is set, the time sheet journal is posted automatically. If the system parameter is not set, the time sheet journal is posted in the window Posting in the G/L module.
- If the system parameter "Central transferal of time sheets" is set, time sheet lines are not transferred directly to posting, but transferred to a queue for subsequent posting. This is for performance reasons. For more information, please see the description of the window Central Time Sheet Transfer.

In the evaluation of time sheet lines, Maconomy looks at whether the line was submitted, submitted temporarily, released, or approved. This is described in the following.

### Submission of Time Sheet Lines

When a time sheet is submitted, Maconomy checks all lines in the sheet to see if any of them do not require approval (see the section "Approval" above). Lines that do not require approval are transferred for posting immediately. If a line requires approval according to the job on the line, but the line is empty, it will be transferred for posting immediately (an administrative posting). An empty line can, for example, be a line which is created automatically by Maconomy because the field "Keep Line" is marked, or it is transferred from a detailed resource plan, but no registrations have been entered on the line during the week. Or it can simply be a line which has been created manually, but no hours have been registered on the line.

If a line requires approval, either by the supervisor, a project manager, or both, it is marked as submitted but not transferred for posting.

### Temporary Submission and Reopened Time Sheet Lines

For time sheet lines that have either:

- Been temporarily submitted and then finally submitted and approved, or
- Been submitted, possibly approved, reopened, and then submitted and approved again,

Maconomy creates a time sheet journal containing the difference between the already registered entries and the new entries. If, for example, 4 hours were originally submitted or temporarily submitted on a given combination of job and activity on a given day, and the number of hours is changed to 6, the new journal will contain an entry with 2 hours on that registration combination. If the registration was instead changed to 3 hours, the number of hours in the new journal would be -1. If the time sheet is approved without changes since it was temporarily submitted or reopened, Maconomy does not create a journal entry.

### Released Time Sheet Lines

A time sheet can be released for posting by the supervisor or someone else with access to doing so (see the description of the action "Release Time Sheets"). When you do this, Maconomy evaluates all lines as eligible for posting and transfers them. When the lines are later approved, Maconomy will balance any differences between the posted and the approved lines in the same way as for reopened lines.

### Approved Time Sheet Lines

Time sheet lines that are evaluated in connection with an approval are transferred for posting if the complete approval is successful — that is, the lines do not require project manager approval. Lines that require project manager approval must be approved in the window Approve Time Sheet Lines before they are transferred for posting.

## Fixed Hours and Posting

When you submit a time sheet, either temporarily or finally — that is, the following does not apply to reopened time sheets — Maconomy checks if the number of fixed hours stated on the time sheet in the field “Fixed” in the island Total is still valid. If the number has been changed for the employee in the windows Employees (for the employee revision applying on each day covered by the time sheet) or Week Calendars in the Set-Up module, the new number is transferred to the time sheet when it is submitted. This will affect the calculation of overtime for the current and for future time sheets.

For example: An employee has had a fixed working week of 8 hours per day, Monday to Friday, ever since he was employed 1 year ago. A report shows that he has a total overtime balance of 20 hours. His fixed working hours are then changed from 8 to 7.5 hours per day due to a change in the week calendar. This change has no effect on the report showing the 20-hour overtime balance. The latest time sheet he created still shows that he has to work 8 hours a day, but upon submission, a notification is given saying that the number of fixed working hours has been changed on the current time sheet. All future time sheets will, upon creation, get a number of fixed working hours of 7.5.

If you use a combination of daily and weekly time sheets, Maconomy checks if the number of fixed hours has already been updated on the daily time sheets and adjusts the number of fixed hours accordingly.

If the field “Update Fixed Hours Upon Approval” is marked, a similar update will take place at the time of approval of the time sheet.

Note that the above functionality requires that the system parameter “Use Fixed Hours Stamped on Time Sheets” is set.

## Details about the Contents of the Time Sheet Journal

- When posting time sheet journals, Maconomy checks whether the journal in question contains entries where the posting date is outside the open posting period for G/L entries in the companies affected by the time sheet lines. If the journal contains such entries, the G/L entries created as a result of the posting will be assigned a posting date corresponding to the first date in the open G/L posting period of the company in question. The job entries created are assigned the posting date specified in this window, as well as a reference date identical to the one used on the G/L entries.
- The cost and billing prices of the hours registered in the fields “Time Activity 1-3” are set at 0 in the time sheet journal. This is done to avoid double registration of hours entered in both weekday fields and time activity fields, as done in the case of overtime registration.
- Currency and job name are transferred automatically from the main tab of the affected jobs in the window Job Information. The posting description is taken from the field “Description” on the line in question.
- The cost and the billing price are calculated according to the principles outlined in Appendix A.
- Dimension values derived from the employee, activity, job, or company are transferred to the journal. When entering amount activities in the time sheet journal, Maconomy uses the company specified in the island Company on the activity as the executing company. If no company has been specified here, the employee's company will be used. If no employee has been specified, the company assigned to the job will be used as the executing company.
- If an employee has been working on a job which is to be invoiced by another company (the responsible company) than the one to which the employee is assigned (the executing company), the posting will in most cases result in intercompany entries between the two companies. Thus, a time sheet journal will be created for each company for which the employee has been working. At the posting of the journal, the intercompany entries are printed out with the normal journal entries.

## Access Control

Besides you, the following people may have some degree of access to your time sheets.

A user can see or create a time sheet for an employee if the user:

- Is the employee himself/herself, or
- Is the employee's supervisor, or
- Is the employee's secretary, or
- Is the employee's mentor (read-only, not change), or
- Can see all time sheets (read-only as defined in the window Actions, typically an administrator), or
- Can change all time sheets (read and change as defined in the window Actions, typically an administrator)

A user can approve a time sheet for an employee if the user can see the time sheet, and the user:

- Is the employee's supervisor, or
- Is the employee's secretary, and the system parameter "Secretary can Approve Time Sheets" is set, or
- Has access to change all time sheets

Furthermore, time sheet lines may require project manager approval, in which case the project manager can see the lines in the window Approve Time Sheet Lines.

A user can reopen a time sheet if the user can see the time sheet, and the user:

- Can reopen time sheets (in the window Actions)

A user can release a time sheet if the user can see the time sheet, and:

- The user is the employee's supervisor, or
- The field "Trans. Non-Appr. Time Sheets" has been marked in the window System Information, and
- The user can release time sheets (in the window Actions)

## Set-Up

Time can be registered according to two different principles: weekly (standard) or monthly time registration. The latter principle is selected by setting the parameters "Monthly Time Reporting" and "Split Week Time Sheet" in the window System Parameters in the Set-Up module. If you do this, a link is created between time sheets which belong to the same month. If a time sheet is created on Monday, May 1st 2006, Maconomy will create five time sheets, of which the fifth time sheet covers Monday, May 29th through Wednesday, May 31st (split week, see below). When a line is created or changed in a week, it will be created or changed in all time sheets covering that month. Furthermore, temporarily submitting, submitting, releasing, approving, and reopening a time sheet will apply to the whole month. Using Maconomy's layout editing tools, you can add fields to the time sheet which show the aggregate hours for the entire month, corresponding to the ones which are normally shown for the week in the island Total.

Furthermore, it is possible to work with split-week time sheets. This is optional when using weekly time reporting, and mandatory when using monthly time reporting. You select this by marking the system parameter "Split Week Time Sheet" in the window System Parameters in the Set-Up module. If you do this, Maconomy will create two time sheets for weeks that extend from one month to the next. The field "Part" in the island Period shows whether the time sheet belongs to the first or the second part of the



week (part “A” or “B”). If you attempt to enter hours on a day in a week which belongs to another part of the time sheet than the current one, an error message is displayed.

Example: Week 22 in 2006 begins on Monday, 29th of May. In this case, Maconomy will create two time sheets: “Week 22 A,” showing three days (Monday, May 29th through Wednesday, May 31st), and “Week 22 B,” showing four days (Thursday, June 1st through Sunday, June 4th). This makes it possible to close a month sooner, as part “A” can be submitted and approved before part “B” is completed. The field “Date” in the island Period shows exactly which period is covered by the current time sheet.

In the window System Information, you can choose between three principles for transferring the days in a time sheet to the time sheet journals. These principles are described in the field “Allocation Method” in the window System Information in the Set-Up module.

## Deleting Time Sheets

You can delete a time sheet as long as none of the lines in the time sheet has been transferred for posting. When split weeks are used, and you choose to delete a time sheet which covers one part of the split week, the time sheet for the other part of the week is deleted as well, unless you are using monthly time reporting. If you use monthly time reporting, and a time sheet is deleted, the time sheets for the remaining weeks in the month are deleted as well.

From SpeedSheet Workspace

### Admin Note: Enabling the SpeedSheet

To use the SpeedSheet, the following system parameters must be enabled:

- “Allow Incomplete Time Registrations”
- “Use daily time sheets”

For more information, see the descriptions of these system parameters.

Furthermore, access to this window requires add-on number 122.

Note also that this window applies to the Maconomy client for the Java™ platform only. For information about using this client, see the chapter “Getting Started with the Java™ Client.”

## Starting the SpeedSheet

When you use the Maconomy Client for Java™ platform (also called the “Java client”), you can start the SpeedSheet by clicking the Maconomy icon in your system tray (Windows) or dock (Macintosh OS X).

### To insert a valid time sheet line in the SpeedSheet, complete the following steps:

1. When the SpeedSheet is opened, the input focus is set to the field “Favorite.” If you press the Down-Arrow key, your personal list of favorites will be opened. Press the Down-Arrow key till you find the right favorite (or start typing its name), and press Return to select the favorite.
2. Press Tab to move to the “Note” field, and enter a note about what you were doing.
3. Press Tab again, enter a number of hours, and press Return to insert the new line into the SpeedSheet for the current day.

In the following, each element in the SpeedSheet is described.

## Resource Planning

In this module, you can perform detailed planning based on job budgets, including planning the internal and external use of resources, time frames, and so on.



In addition, you can generate reports to give you an overview of each job's use of time, employee plans, available time, and so on.

The workspaces in this module are only available if you have acquired Maconomy's Resource Planning add-on. However, if you have acquired the Human Resource add-on, you have access to the skill-related workspaces in the Set-Up submenu.

This section includes:

- Allocation
- Lookup
- Reporting
- Set-Up

The Resource Planning module is an add-on module to Maconomy.

In this module, you can make detailed planning of the company's employees. It is also possible to get information on whether one or more employees have been allocated too few or too many hours compared to the hours the employee in question is available. Moreover, you can define whether or not an employee is at the company's disposal within a given time frame and whether or not the employee can be included in the resource planning.

In the window Employee Categories in the Set-Up module, you can assign each employee to one or more categories. On the basis of these categories you can then plan for the company's resources without having to specify certain employees, but specifying only the categories. This kind of planning can be advantageous where a company wants to make plans for its resources, but cannot predict which employees will be available at a given time, or which employees will be best suited to carry out a given task in the future. If the company has decided by which category of employees a given task is to be carried out, it can now make plans on the basis of this category instead.

The Resource Planning module is integrated with the Job Cost module, which must therefore also be available for you to use the Resource Planning module. Detailed planning can be made as an independent plan in this module or as a refinement of existing job budgets' estimates created in the windows Job Budgets or Job Planning. The Job Cost module offers you the possibility of making overall planning by means of estimates for the total number of resources that will be used within a given time frame. In the Resource Planning module, you can make more detailed planning, typically for each job some weeks ahead in time. In this module, you can thus define which employee should carry out which tasks for how long time, on which dates.

When refining a job budget by planning which employee should carry out work on which task, this module allows the planner to take employees' skills into account. Each employee can be assigned a number of skills, and if this information has been entered, it is possible to require that a given task should be performed by an employee with specific skills. This is done by assigning a number of skills to job budget lines of planning budgets in the window Skill Requirements, or alternatively in the window Job Planning in the Job Cost module. If skill requirements have been specified for a number of tasks, the detailed planning will reflect these requirements. When an employee is allocated for a task, the system checks whether this employee has the skills required for the task specified on the current job budget line.

## Central Concepts of Resource Planning

This section contains a description of a number of central terms used in the Resource Planning module in connection with the set-up of information about each employee to be used for detailed planning of jobs.

## Employee Categories

An employee category consists of a certain group of employees who belong to the same professional or technical area, department, physical place of work, and so on. An employee can be assigned to several categories if he carries out various work tasks. However, an employee must always be assigned to a primary category, if he is assigned to employee categories. Employee categories are created in the window Employee Categories in the Set-Up module.

Each employee category is assigned with its own price information inclusive of intercompany price, cost price, sales price, and a potential price group, which makes it possible to calculate costs in a job budget in the Job Cost module without having to specify a certain employee, but only an employee category. This can be advantageous when a company wants to make plans for its resources, but cannot predict which employees will be available at a given time. By using employee categories it is possible to make plans on the basis of a category of employees instead of specific employees.

## Employee Absence Calendars

By using employee absence calendars, you can get an overview of each employee's absence for use in connection with detailed resource planning.

An employee absence calendar contains information on when a given employee is absent and the reason for this absence, for example, illness, vacation, or leave of absence. Moreover, you can specify whether the planned absence is definitively decided or only temporarily planned.

If an employee is specified as absent in the employee absence calendar, it is not possible to include the employee in the process of making detailed plans of tasks in the window Detailed Planning for the absence period in question. However, the employee may not be considered absent as soon as an absence calendar line has been created. This depends on the setting of the system parameter "Approval of Absence," as described in the following sections.

### Absence Approval

If the system parameter "Approval of Absence" has been marked, absence must be submitted and approved before becoming effective and thereby influencing the resource plans.

When absence approval is used, the employee can enter absence calendar lines without affecting the planning. When he has entered the desired absence information, he can submit it as an indication that the absence calendar line now contains the desired information, allowing his absence approval responsible (typically his supervisor — see the field "Employee No." in the Absence Approver island of the window Employees) to review the absence calendar line and approve or reject it. Only when an absence calendar line has been approved — and is not marked as temporary — will it be effective and thereby influence the resource plans.

For further information about the consequences of absence calendar lines entering into effect, see the section "Calendar Lines Entering into Effect."

### Calendar Lines Entering into Effect

If absence approval is used, an absence calendar line enters into effect when it has been approved and is not marked as temporary. If absence approval is not used, an absence calendar line enters into effect as soon as it has been created.

When an absence calendar line comprising dates for which planning lines have been created in the window Detailed Planning enters into effect, Maconomy will issue a warning, and the planned number of hours on the dates in question will be deleted, as the employee is no longer expected to be present in that period.

## Reduction Percentage

In resource planning you can take into account that it is often not possible or advantageous to plan an employee's total fixed number of hours, if the employee in question often has to take on urgent matters, attend weekly recurring meetings, other appointments, and so on. Therefore, it is possible to define a reduction percentage of the fixed number of hours for each employee revision in the window Employees in the Set-Up module. This reduction percentage indicates the number of hours for which the employee in question is not available, to give a time margin for urgent matters and the like. See "Planning Time" for more information on planning time and reduction percentages.

## Load Percentage

The load percentage corresponds to the part of the employee's planning time for which hours have been planned. This means that if the employee's planning time is 30 hours per week, and 15 hours have been planned for the employee in the week in question, the load % will be 50%. For further information on planning time, see "Planning Time."

## Planning Time

The planning time covers the number of hours for which a given employee is at disposal and available for the resource planning. The planning time of a given date can be defined as the difference between the reduction percentage and the employee's fixed number of hours on that date. The employee's fixed number of hours on a given date is found in the employee revision applying on the date in question. For further information about employee revisions, see "Date-Dependent Employee Revisions" introduction to the window Employees.

If the reduction is, say, 25% and the fixed number of working hours in a given week is 40 hours, the planning time for this week will be  $40 - (25\% \text{ of } 40) = 40 - 10 = 30$  hours. If a detailed plan is made for this employee in this week, and 35 hours are planned for this employee, it will be considered as if the employee will have 5 hours of overtime, compared to the 30 hours from the above calculation.

## Skills

Information about the skills of employees can be stored in the system. Each skill is assigned a type, for example, "Technical Skills," "Languages," "Travel Preferences," and "Social Positions," depending on the nature of the skill in question. Skill types can be created in the window Popup Fields in the Set-Up module.

Once skills have been created in the system, the skills can be assigned to employees in the window Employee Skills, and for each employee it can be specified at which level he possesses the skill. It is then possible to require that a given task is performed by an employee with specific skills, as described in "Skill Requirements on Job Budget Lines."

## Skill Levels

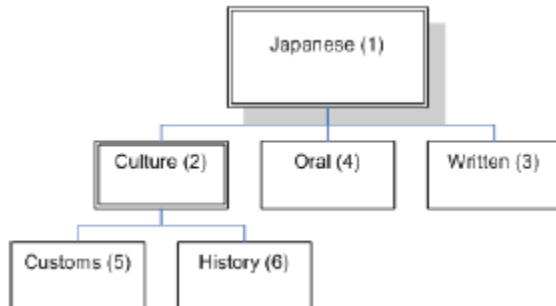
Two employees assigned the same skill may not necessarily master it at equal levels. For example, one employee may speak Japanese fluently, while another is able to speak only simple sentences. To be able to specify how well a skill is mastered by a given employee, it is therefore possible to assign each skill with a set of grading scales. This is done by creating lists consisting of a number of levels. The levels "Novice," "Some," "Trained," and "Experienced" could, for example, constitute such a level list.

## Skill Hierarchies

When planning, it will sometimes be necessary to be very specific about a skill, whereas sometimes it will suffice to be somewhat more general. For example, it will sometimes suffice to specify that an employee possesses the skill "Japanese," whereas in other cases, it may be necessary to specify that an employee

has the specific skill "Japanese, written." To be able to specify such differences in the necessary level of detail, it is possible to structure the skills into hierarchies.

The figure below illustrates an example of six skills grouped together in a hierarchy:



At the top level of the hierarchy, the skill "Japanese" (1) is found. This skill specifies that an employee has a general knowledge of Japanese. It is also possible to associate him with skill (3), "Japanese, Written," which is a subskill of skill (1). This means that this employee has specific knowledge in written Japanese. Similarly, it is possible to specify whether an employee masters Japanese culture (2) or oral Japanese (4), which are also subskills of skill (1). Skills (5) and (6) make it possible to distinguish between employees having knowledge about Japanese culture within either customs or history. Since (5) and (6) are both subskills of (2), they are both also, indirectly, subskills of (1), as (2) is a subskill of (1).

It is possible to use different skill levels for two skills in a hierarchy. If an employee is, for example, assigned skills (3) and (6), he could, for instance, be assigned the level "Some" in "Japanese, Written" and "Novice" in "Japanese Culture, History." The different skills in a hierarchy can also be assigned different level lists. This way it is, for example, possible to use one level list for specialized skills (typically at the bottom of the hierarchy) and another level list for the more general skills (typically at the top of the hierarchy).

### Skill Requirements on Job Budget Lines

For job budget lines on which time activities have been specified it is possible to require that the task in question should be performed by an employee with specific skills. This is done by assigning a skill requirement to a job's planning budget lines in the window Skill Requirements, or alternatively in the window Job Planning in the Job Cost module. Each skill requirement consists of a specification of both the skill and the skill level required.

For each skill requirement, it can be specified whether a skill level is mandatory, preferred, undesired or disallowed. That means that if a skill is mandatory or preferred, the employee should possess the skill in question, whereas he should not possess the skill if the skill has been specified as undesired or disallowed on the job budget line.

Once skill requirements have been specified for a number of tasks, Maconomy will assess to what degree each requirement is met by employees assigned to each of these tasks. When an employee is allocated hours on a task in the Detailed Planning window, the system thus checks whether the employee in question has the skills required for the task specified on the current job budget line. Similar functionality applies in the Job Cost module, so that when a job's planning budget is approved, each new or modified skill requirement is checked against the employees allocated to perform the work on the tasks specified on the lines.

When a user needs to allocate employees on a task, he can choose to look up which employees match the requirements specified for the task in question by means of the window Task Staffing. In this window, the user can search for employees who match the skill requirements specified for a job budget line, as well as a number of other search criteria. It is also possible to perform searches for employees in the window Browse Employee Skills, in which the user can search for employees matching up to ten arbitrary selection criteria. When a search is performed, Maconomy takes into account the available time of each

employee and to what degree each employee meets the specified requirements. Both of the search windows also offer the user the possibility to opt for employees who do not necessarily meet the required skills by modifying the search criteria.

### Skill and Level Match Percentages

The skill match percentage and level match percentage are used in the search windows Task Staffing and Browse Employee Skills to show to what degree an employee matches the skill requirements specified for a job budget line or by selection criteria, respectively. Maconomy uses these two percentages along with a number of other criteria, such as an employee's available time and potential overtime, when determining how well an employee matches a skill requirement and should be shown in the table part of the windows. The skill match % displays how many of the skills specified on a job budget line an employee possesses, whereas the level match % displays how well the levels possessed by the employee match the skill levels specified.

The skill match percentage shows for an employee how many of the skills specified on a job budget line he possesses. The percentage is displayed as a fraction, calculated as the number of skills possessed by the employee divided by the total number of skills specified on the job budget line in question.

The level match percentage is calculated as the average of the level match % of each skill requirement specified for the job budget line. An employee will get a level match % of 100 if he is assigned a required or mandatory level. If he possesses a level either below or above the mandatory level, the level match % will be below 100% to indicate that the employee would be either underqualified or overqualified for the task on the job budget line.

### Detailed Planning

In the window Detailed Planning, you can maintain detailed plans as either an independent plan in this module or as a refinement of the overall plans specified in the job budgets. In the latter case, you can use the window Detailed Planning to specify how a plan should be carried out in details. An example could be that a given company makes detailed plans for a larger plan once every week.

The period of a larger plan to be displayed in the window is defined in the card part of the window. A detailed plan consists of a number of table lines, each specifying a job, an activity, a task, the number of hours to be worked on the job and a potential employee.

In the island Employee Availability, you can always see the number of hours planned for ten selected employees. This information is based on the employees' absence calendars and reduction percentages. When a detailed plan is created, you can, therefore, have information displayed on each selected employee's work load. This means that the planner can ascertain whether one or more employees have been allocated too few or too many hours within a given time frame. Maconomy can be set up to warn the planner if an employee has been allocated too many hours within a given week.

### Creating and Maintaining Detailed Plans

As mentioned in the section "Detailed Planning," a detailed plan can be created as an independent plan or as a refinement of existing job budgets created in the window Job Budgets.

The planning lines are created and maintained on the basis of the information entered in the table part in a grid structure with slots. Each planning slot specifies a period of either a week or a day, depending on whether you have specified planning to be carried out on weekly or daily basis in the card part of the window. The time horizon is also specified in the card part of the window.

If the planner chooses to create planning lines on the basis of existing job budget lines, the window Detailed Planning contains an action which shows proposals to the tasks on which work should be done in the period represented by the window. This "proposal" will be based on the latest revision of the jobs' planning budgets describing the tasks to be carried out within a range of dates which overlap the time frame displayed in the window.

In a job budget, you might, for example, have created a job budget line which specifies that 20 hours should be used on task T by an employee who belongs to the employee category EC. When a proposal is created, Maconomy will display that a proposal for 20 hours to be carried out by an employee assigned to the category EC has been created for task T (without any specification of a specific employee). If you decide that employee E (belonging to employee category EC) should carry out all 20 hours of work, and if the number of hours on the job budget line is then changed to 25 hours, Maconomy will automatically display that another 5 hours should be allocated on task T by a member of category EC in the field "Quantity, Remaining" on those planning lines for which the job budget line in question forms the basis. Maconomy makes a corresponding calculation if the number of hours on the job budget line is reduced. If the number of hours is reduced by, for example, 5 hours for an employee, Maconomy automatically suggests that these 5 hours are deducted from the employee's number of allocated hours by showing a negative number of hours on the planning line in question.

In the above example, it was decided that all hours should be assigned to only one employee. However, the number of hours proposed by Maconomy at the creation of planning lines on the basis of a job budget can also be allocated to several employees, but only if an employee category has been specified on the job budget line instead of a specific employee, or if you have specified neither an employee category nor an employee.

You can thus make plans for several employees on the same task created on the basis of a job budget line. The planner can select to create a long-term plan by means of a job budget, which can then later be refined by allocating the planned number of hours to the employees in question. This can be done when it has been decided exactly when which employees are at disposal, or which employees might be best suited to carry out the tasks in question.

If planning lines have been created on the basis of a job budget, and this job budget is revised, Maconomy will bring the planning lines in question up to date. Planning lines that might now be assigned to a deleted job budget line will also be deleted. If a detailed plan is assigned to a job budget, it is also possible to select an action that deletes all planning lines assigned to job budget lines that have been marked as completed in the window Job Planning. In this way, the resource planning will always be updated.

When information for a detailed plan is maintained, Maconomy can allocate hours automatically by using a number of tools when hours are entered for an employee on a planning line.

When detailed plans are maintained, Maconomy also checks whether the planner exceeds the number of hours specified in the job budget that forms the basis of the detailed plan. This might be the case if planning lines have been created for more hours on a task than originally specified on the job budget line used as a basis for the planning. If this happens, Maconomy can be set up to solve the problem by means of a selected method.

If an estimated time-to-completion has been specified for the job budget by time sheet users or by the project manager in the Job Cost module, the estimate will be shown in the detailed planning. The planner will then know whether any resources should be added or removed from each task in the detailed planning. For each estimate specified for a task, a date must also be entered. This date stamping is used in the detailed planning to inform Maconomy as of which date the estimate should be implemented in the detailed plan.

For example, assume that in a planning budget 100 hours has been budgeted for a task. It is then planned in the detailed planning that 40 hours should be completed by the end of a given week, and the remaining 60 hours are planned after this week. Then assume that only 35 hours were spent in the week in question, and in addition it is estimated that, by the end of the week, 50 hours remain to be completed of this task. Then this estimated time-to-completion and an estimate date will be shown in the detailed planning to tell the planner that as of the week in question only 50 hours need to be planned — not 60 and not 65 ( $60 + (40 - 35) = 65$ ).

If an employee is allocated too many hours compared to his planning time, you can define how Maconomy should react to such a situation in the window System Information in the Set-Up module. In



that window, you can define whether Maconomy should ignore the situation, give a warning, or avoid the situation by issuing an error message.

## Sales Orders

This chapter describes the Sales Orders module in Maconomy. Here you process quotes, sales orders and credit memos. Maconomy automatically completes various customer and item information for you, retrieving it from the Accounts Receivable and Inventory modules.

Maconomy supports a wide range of warehouse-related functions, making it easy to print and confirm packing lists and produce packing slips and invoices. You can also invoice directly, creating an invoice from a sales order in the same window.

## Subscription

Use this module to process quotes, sales orders and credit memos. Maconomy automatically completes various customer and item information for you, retrieving it from the Accounts Receivable and Inventory modules.

Maconomy supports a wide range of warehouse-related functions, making it easy to print and confirm packing lists and produce packing slips and invoices. You can also invoice directly, creating an invoice from a sales order in the same workspace.

This section includes:

- Registration
- Delivery
- Invoicing
- Lookup
- Reporting
- Commission
- Set-Up

## Central Concepts in the Subscription Module

The integration to the Sales Orders module means that the invoicing and delivery of a subscription order is carried out using the Sales Orders module. The Subscription module itself is used for the registration and maintenance of subscriptions, subscription orders, and issues of relevance to the subscriptions.

The effect of the integration with the Sales Orders module means that a sales order is created whenever issues are transferred from a subscription to a subscription order. The created sales order corresponds to the subscription order in the sense that it contains information about the subscription upon which it is based. The sales order is used when delivery and invoicing of the subscription order is carried out.

A subscription can either be periodical, meaning that invoicing is carried out for a specified period each time, corresponding to a standing order, meaning that invoicing follows every delivery, or invoicing is carried out via an assigned job in the Job Cost module.

The invoicing of periodical subscription orders is initiated in the window Prepare Subscription Invoicing which leads to the creation of sales order lines for the relevant subscription order. In the window Print Invoice in the Sales Orders module, the subsequent invoicing takes place whereas delivery is carried out when a packing slip is printed out from the window Print Packing Slip in the Sales Orders module.

Invoicing of subscriptions, which are invoiced per delivery, is carried out from the window Print Invoice in the Sales Orders module, whereas the delivery of such subscriptions is carried out in the same way as the delivery of periodical subscriptions.

If a subscription is assigned to a job registered in the Job Cost module, invoicing can be done in the Job Cost module or in the Sales Orders module. A subscription order can only be assigned to a job which is on order. Please note that if a customer has been invoiced for too long a period, all types of subscription orders can be credited directly in the window Subscription Orders.

In the following sections, the central concepts in the subscription module will be described in further detail.

## Subscriptions and Issues

As mentioned, a subscription can either be periodical or correspond to a standing order with invoicing per delivery.

Due to the integration with the Sales Orders module, a periodical subscription is registered as an item in the Inventory module. The price of the item corresponds to the price of the issues delivered during a given period. The item corresponds to the price of delivery of the issues which are published within a period of a specified duration. A subscription to a magazine published once a month is an example of this. If a customer orders a biannual subscription, the customer will place a subscription order for a subscription for which invoicing covers six months, that is, the delivery of six issues.

The invoicing of a periodical subscription is, among other things, based on the invoicing form and due date which together determine the time at which the invoicing of a subscription takes place. The invoice form of a quarterly subscription can, for example, be quarterly prepayment, that is, prepayment for three months at a time, while the invoice due date states the date on which invoicing is to be carried out. Invoicing is determined by the selected invoicing form. The first time invoicing of a periodical subscription is carried out, invoicing will take place from the start date of the first invoicing due date. Subsequently, invoicing typically takes place for one period at a time in accordance with the period entered for the selected invoicing form. Thus, the price of a periodical subscription covers all issues in the current period, which leads to the creation of an extra order line on the sales order being invoiced. This order line will form the basis of the invoicing of the current subscription order.

A subscription is regarded as a standing order if invoicing is not carried out periodically, and invoicing of such a subscription follows delivery.

Finally, it is possible to invoice subscription orders on account. An invoice on account is created on the basis of the amounts entered in the island Invoice On Account in the window Subscription Orders. The invoice on account is posted by accruing the amount invoiced on account on the current customer's account. The tax amount invoiced on account is posted on the account for the tax code registered on the subscription order. At the final invoicing of the subscription order, the amount invoiced and the assigned tax amount are balanced against the amount invoiced on account and the tax amount invoiced on account, respectively.

## Subscription Orders

As mentioned, a subscription can be defined as an item which consists of a number of issues of, for example, a magazine. A subscription order contains information about who is entering into the agreement, that is, the customer's name and address, as well as information about the number of subscriptions and issues ordered by the customer.

If a customer for instance orders a biannual subscription to one magazine and an annual subscription to another magazine, both orders can be registered on the same subscription order.



## Work Flows in the Subscription Module

This section contains a short introduction to the work flows in the subscription module. Furthermore, the section will briefly describe which type of information that you register in the windows in this module.

### Creating and Maintaining Subscriptions

Information about a subscription and the issues assigned to the subscription is registered in the window Subscription Information Card. In this window, you also register an item number for periodically invoiced subscriptions. In the table part of this window, you register the issues which are published as part of the current subscription. You also register information about the publishing date, and so on.

If you create an issue as an item in the window Item Information Card in the Inventory module, you can subsequently assign this issue to an existing subscription. After adding the issue to a subscription, you update the subscription orders with the current subscription, using the action "Update Orders." When you update the orders, new sales order lines are created. These lines enable you to carry out the invoicing of the current subscription order via the Sales Orders module. You can inspect the delivery lines in the window Subscription Order Lines.

### Creating and Maintaining Subscription Orders

Agreements with a customer to take out a subscription are registered in the window Subscription Orders. In many ways, this window is similar to the window Sales Orders in the Sales Orders module. The window Subscription Orders is used for the registration of information about the customer and the subscriptions that a customer wishes to take out.

If the customer has not ordered a full subscription, you can enter a period of delivery. This period will then determine the issues of the current subscription that the customer will receive.

The invoicing form and due date are normally based on the selected subscription. You can, however, to a certain extent adjust the invoicing according to the customer's needs in the window Subscription Orders. One limitation is that you can only change a periodical invoicing form to another type of periodical invoicing. In other words, it is not possible to change invoicing per delivery to periodical invoicing, or vice versa.

### Invoicing Subscriptions

As mentioned, the invoicing of subscription orders as standing orders takes place from the window Print Invoice in the Sales Orders module. Here you enter a range of subscription numbers and invoice dates. Furthermore, the field "Create Subscription Invoices" must be marked to allow invoicing. For a more detailed description, see the description of the window Print Invoice in the chapter "Sales Orders" in the reference manual.

As mentioned above, the invoicing of periodical subscription orders starts in the window Prepare Subscription Invoicing as you create sales order lines for the subscription order. The creation of sales order lines enables you to invoice the current subscription order via the Sales Orders module. In the window Print Invoice in the Sales Orders module, you can then print out the invoice itself. In the window Subscription Order Lines, you can inspect the sales order lines created through the window Prepare Subscription Invoicing.

The invoicing of a subscription is based on the invoicing form and due date. The invoicing of a periodical subscription is carried out for a period at a time, whereas the invoicing of a standing order follows each delivery.

Invoicing of a subscription order assigned to a job in the Job Cost module is done via the window Subscription Orders. In the island Job Cost, you can specify to which job, activity, and task the current

subscription order is to be assigned, and by marking the field “Invoice in Job Cost” you can specify that the current subscription order is to be invoiced in the Job Cost module. However, invoicing via the Job Cost module is only possible if the current subscription order has been assigned to a job.

Note that if subscription orders are invoiced in the Job Cost module, no accrual will be carried out neither in the Job Cost module nor in the G/L module. This also means that one job entry will be created for the entire order amount. If the subscription order is assigned to a job, but the field “Invoice in Job Cost” has not been marked, one job entry will be created for the total invoiced amount in the Job Cost module, while accrual will be made for the amount as usually in the G/L module. This accrual is thus not reflected in the Job Cost module.

## Delivery

The registration of the delivery of issues is carried out in the window Print Packing Slip in the Sales Orders module. In this window, you enter a specification of the range of subscriptions or subscription orders you wish to print out for delivery. A detailed description of the window Print Packing Slip is given in the chapter “Sales Orders” in the reference manual.

As mentioned above, delivery lines are created whenever a subscription order is updated in the window Subscription Information Card. Updating subscriptions leads to the creation of a delivery line for every issue which is part of the current customer’s order. You can also create delivery lines, using the action “Get Issues” in the window Subscription Orders. During the creation of delivery lines, a sales order is created in the Sales Orders module as well. The sales order is based on the subscription order in use at the time of creation. Sales orders created in the subscription module are only shown in the window Sales Orders if the field “Show Subscription Sales Orders” in the window System Information is marked. Note that the window Sales Orders only allows you to view and not process orders created in the subscription module. Changes to subscription-related sales orders must be made in the window Subscription Orders.

When delivery lines and sales orders are created for a subscription order, delivery will take place according to the same guidelines as in connection with ordinary sales orders, that is, you can print out packing lists and create packing slips. When a packing slip is created, it corresponds to the delivery of the current issue and Maconomy will register the reduction of inventory provided that inventory control is used on the current issue. If invoicing is controlled by delivery, the issue will, at this point, also be ready for invoicing.

## Updating Price Revision

Subscription order prices can be maintained in two ways: According to price indexing principles or through an explicit price updating made for a range of subscription orders. The two methods are described below.

### Price adjustment through price index principles

The most flexible, accurate and low-maintenance way of keeping subscription prices up to date is through price indexes. With price index adjustment, you can set up price adjustment rules that match your subscription contacts, thus ensuring that price increases are always in line with contract terms. Furthermore, the price adjustment takes place automatically as part of the subscription invoice preparation, thereby saving time and avoiding miscalculations. As it is possible to set up multiple price index tables, you can work with multiple price adjustment terms depending on the subscription or customer.

For a detailed description of the use and set-up of price index principles, see the window Price Adjustment Principles.

### Batch price adjustments

If you wish to update the prices of several subscription orders according to a price list which you keep updated, you can do so in the window Subscription Changes. The changes are carried out, using a cut-off date. The cut-off date is used for defining the price list to be used. When a cut-off date is entered, all subsequent prices concerning the current subscription will be based on the price list valid on the entered cut-off date.

### Terminating and Blocking a Subscription

You can terminate a subscription by entering a delivery end date in the window Subscription Orders. If you enter an end date, no issues which are a part of the relevant subscription and published after the end date will be transferred to the subscription order. If a delivery end date is entered, this will lead to an end date for invoicing as well. In such cases, invoicing stops when all deliveries have been carried out.

If you wish to terminate or block a subscription due to the lack of payment, you also enter a delivery end date. This will lead to a blocking of the subscription order as well. You can, however, also block the customer for delivery in the window Customer Information Card. If you choose to block the customer on the customer information card, you also block ordinary sales orders that have no connection to the subscription module.

## Set-Up

Use the Set-Up module to enter and maintain general information common to all Maconomy's modules, including system parameters, access control, pop-up fields, employees, and installation information.

You must enter this basic information before you can begin using other Maconomy modules. Among other reasons, the set-up is necessary to assure that entries can be posted, and to the proper accounts.

# Dimensions

## Overview

Executives seeking deeper insight into financial performance need multiple ways through which to view the company's activities – such as by the business unit, department, client, resource, service line, or even the industry group. This kind of deep visibility and reporting requires appropriate “tags” on all transactions (such as time postings and invoices) along with the discipline to ensure those tags are in place. Deltek Maconomy provides both the structure *and* discipline needed for this kind of visibility and insight.

The Maconomy data model is structured around a series of **dimensions**, which partitions views of the company and its activities into logical groups, each serving as a lens by which any appropriate role can view the organization.

In addition to exceptional transparency across the firm and multiple ways to view its performance, the Maconomy product delivers exceptionally disciplined control for ensuring every transaction includes the appropriate dimensions. Maconomy's unified approach means multiple dimensions can be *derived* into a given transaction from simple, minimal input of other key dimensions.

Consider an employee posting time. After selecting a project, a task (to indicate what kind of work has been done) and entering hours, Maconomy automatically derives an activity from the task, which contains the set of posting references that indicates where it should be posted in the chart of accounts and in the G/L. From the project, Maconomy then automatically derives the department to which the project belongs, the client associated with the project, and the type of services be delivered, which are automatically added to this transaction. The employee's department and employee number are also automatically stamped on the transaction. This concept of automatically tagging a single transaction with multiple reporting points of interest is truly the power behind dimensions.

**Note:** There is a detailed example illustrating this scenario later in this section.

These dimensions that are “tagged” to various transactions translate to report selection criteria when generating reports. Thus the central purpose of dimensions in Maconomy is to enable you to have full P&L reporting capability, reporting from historical transactions based on the various dimension values that were in place when each transaction occurred.

## Global and Local Dimensions

Maconomy has 12 dimensions, with 10 that are truly definable for your company's unique reporting needs. The two dimensions that are not definable are Company (Entity), and Account (G/L Account). These two dimensions must be used as designed.

The other 10 dimensions give you the flexibility to determine how you would like to see your firm's key metrics, such as Gross Margin and Profitability. Your company can decide whether to use all or just some of these 10 “open” dimensions.

There are seven “global” dimensions, which are common to all companies in your system, and three “local” dimensions, which are specific to each company within your system (assuming you have multiple companies setup in your environment).

The most common application of local dimensions is to support statutory requirements for the chart of accounts. For instance, if you have a US company with an entity in France, this may require you report transactions in both your US Consolidated chart of accounts as well as meet the local French statutory requirement for the chart of accounts. Thus, Maconomy supports this requirement through the concept of Local Dimensions.

If you do not have the above requirement related to having multiple chart of accounts, it is also possible to use the Local Dimensions as you would regular, Global, dimensions. Thus, you have up to 10 opportunities to determine how you would like to tag information for reporting purposes.

## Default Values

You can set up the system to use default values for dimensions in Maconomy for ease of use, so that each dimension has a default value.

Also, if your company plans to NOT use certain dimensions, set up default values at initial use (for example, with a "-"), and then these values will automatically be chosen when entering transactions and thus will not require manual input.

## Dimension Combinations

A dimension combination is a collection of dimension values with a common name. For each dimension, you can apply company-specific values. This way, the value specified for a certain dimension in a given dimension combination depends on the company making this entry.

Dimension combinations are used in the following ways:

- **As templates** — Dimension combinations can be used as templates for islands on various workspaces. These templates are convenient if you often specify the same derived dimension values items such as activities, jobs, customers, accounts, and so on.
- **As posting references** — A posting reference is a reference to an account to which the posting should be made when Maconomy creates automatic G/L entries.

## Company-Specific Dimension Values

Use company-specific dimension values to enter a range of company numbers to track. You can enter a value for each dimension and specify if the value should overwrite any existing dimension value.

When Maconomy derives values, it uses the process below to allocate derived dimension order:

1. If a value is specified for the dimension in the Derived Dimensions island on the activity, this value is used along with its "Overwrite" specification.
2. If no value is specified in Step 1, Maconomy uses the value specified for the dimension in the topmost line which indicates the company for which the entry is made, along with its "Overwrite" specification.
3. If no value is found in Step 2, Maconomy uses the value specified in the tab of the Dimension Combination workspace, along with its "Overwrite" specification.
4. If no dimension value is found in the tab, no value is derived for the current dimension from this derivation priority.

**Note:** The **Overwrite** field for a given dimension is always retrieved from the same location as the dimension value. This means that if the dimension value is retrieved from the sub-tab of a dimension combination, the value of the **Overwrite** field is also retrieved from the sub-tab of the dimension combination.

## Example

Once dimensions and derivations are set up, this is an example of how it works.

Say that you have an employee, Joe, who works in IT Consulting Department. You need to set up his information so that you will be able to include him and his activities on various reports. For example, you can set it up so that every time the employee enters information on his timesheet, Maconomy will derive a value from Location (such as Office), such as “NY” and Entity (such as Department) as “IT.”

**Note:** Location and Entity are two of the 10 definable dimensions, and as such we have defined them here as Office and Department.

Next, the employee enters time on his timesheet. A lot of information is generated by a timesheet entry, which tracks hours, activities, and ultimately the profitability associated with various projects. As such, timesheets can function as the backbone for numerous reports.

We can set up dimensions behind the scenes to certify which project the time goes onto, as well as which customer is related to this project, and which department. We can then report on the progress filtered by all of these variables. However, we don't need the employee to enter all of this information each time he records hours on a timesheet. Instead, we set up Maconomy beforehand, using dimensions, to link all of this information together.

Once the employee logs in, he doesn't have to enter which department he belongs to, since Maconomy knows this through the Entity dimension. When the employee enters a task on the timesheet, the task is set up to automatically derive an activity, and then the activity is linked to a financial account. The employee enters time on a project, but then behind the scenes, the project is linked to a project department and a project type. It is also linked to a customer, the company of both the employee and the project, and perhaps other links may have been defined.

Taking this a step further, once this timesheet is posted, it generates financial entries to both the general ledger and the project sub-ledger. Now you can run a report for any of the previously defined dimensions in your system.

## Derivations

You can set up derivations to work with dimensions. A derivation is a value a dimension should derive when the dimension is chosen (such as all employees with New York listed as state will derive US as country). You can also indicate whether the derived value should overwrite any existing values.

The derived value can come from other dimensions, or from jobs, activities, employees, vendors, customers, or the user. Derived dimensions are values that you setup to be linked behind the scenes in Maconomy. You can specify values that you want to derive from each job, activity, and so on, in the Derived Dimensions island in the window in which the information tab is created and maintained, such as the Jobs workspace. If a dimension value is derived, it is not necessary to enter a value manually in the field, as the derived value is transferred automatically.

## Dimension Derivation Process

After you set up the derivation for each dimension needed, Maconomy follows a process to derive the dimensions. As a general process, Maconomy retrieves the values to be derived from a given account, location, entity, project, purpose, spec. 1-3 value, local spec. 1-3 value, job, or employee from the Derived Dimensions island in the tab of the specified location, job, employee, and so on. However, the dimension derivation process varies according to these situations:

- When a new entry is added
- When an existing entry is updated
- When journal entries posts

These three processes are described below.

## When a New Entry is Added...

When you add a new entry (such as a new General Journal line or a new Job Journal entry), Maconomy performs dimension derivation using the procedure below.

**Note:** In the description below, **P1** is used for the information type with the highest priority, **P2** is for the second highest priority, and so on.

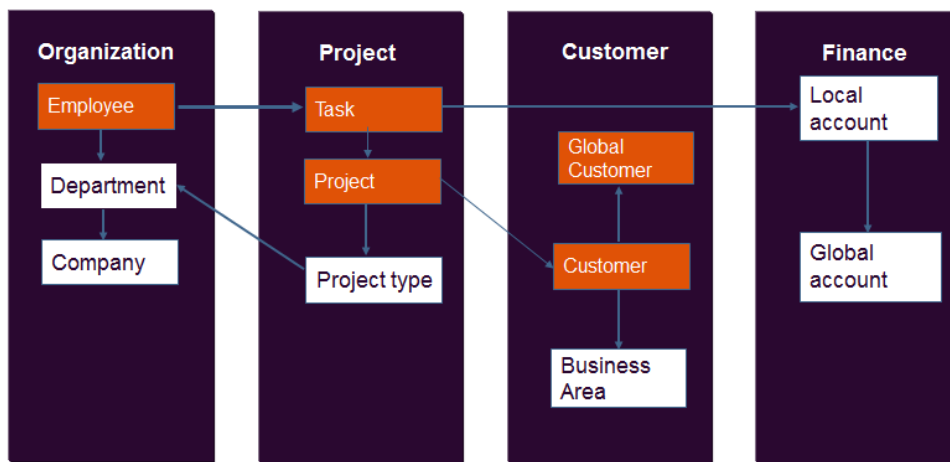
1. Maconomy transfers the P1 value to the entry based on the following:
  - The dimension values are specified in the Derived Dimensions island on the information card of the value.
  - The **Overwrite** field is selected.

This occurs regardless of whether a value is entered manually in this entry for the dimension.
2. Step 1 repeats for the subsequent values with priority numbers (P2, P3 and so on, skipping any values that are overwritten or not added). Maconomy keeps any manually entered values that are not overwritten by a derived value. While the values mentioned in Step 1 are transferred to the entry, these values are only derived to blank dimensions in the entry. Values are not transferred to dimensions which have already received a derived value from a higher-priority information type. Also, values are not derived to dimensions in the entry which still have a manually entered value from when the entry was created.
3. This step only occurs when deriving dimensions in the sub-tab of windows where dimension values are specified in the tab. In this case, “context values” are used. This is a value which is specified in the card part of a window and transferred to the table part if Maconomy cannot derive a value for this dimension using the manually entered values. If, at this point, one or more dimensions still have not derived a value, Maconomy retrieves the values for those dimensions from the card part of the window.
4. If any dimensions still have not received a value, Maconomy uses the standard value for this dimension from the System Parameters window.

### Example 1

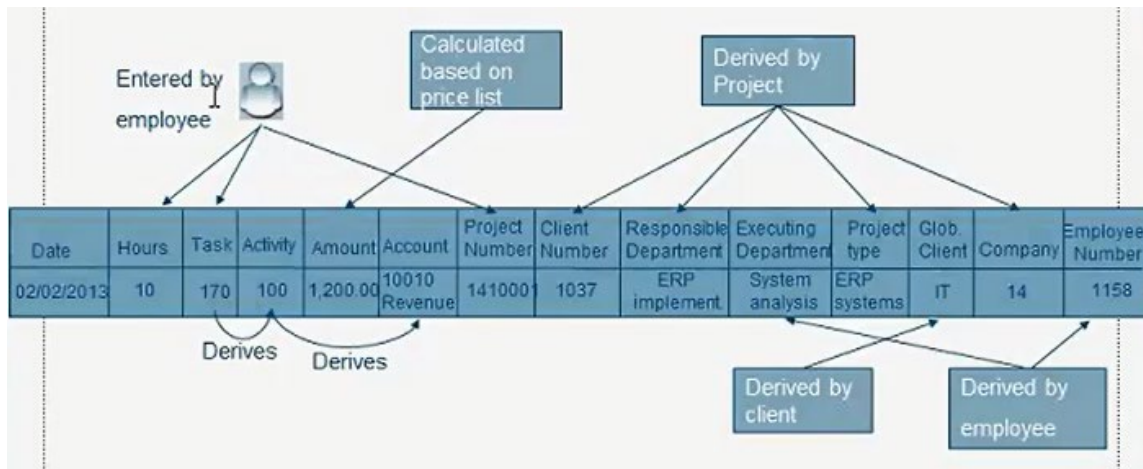
The example below shows the flow of information in dimensions.





## Example 2

The example below shows how a simple time transaction where an employee identifies the Project, Task, and Hours, will automatically derive a number of important reporting identifiers, referred to as dimensions.



## When an Existing Entry is Updated...

When one or more dimension values are updated on an existing entry, the derivation process is the same as when you create an entry (described above).

However, Maconomy will only attempt to derive dimension values from the dimensions for which you have specified a new value. This means that if you change the value of the Location dimension, Maconomy will only try to derive dimension values from the new value in this dimension, even if the other dimensions also have a value (the value they were given when the entry was created).

**Note:** Dimension values are only derived if Overwrite is selected for the applicable values in the information card which causes the derivation. If you change the value for the Location dimension in an entry, and the location specified derives a value for all dimensions, but Overwrite is only selected for the Entity dimension, only the Entity value is derived to the entry, whereas all the remaining dimensions keep the existing values of the entry.



## When a Journal Entry Posts...

When an entry is posted, Maconomy checks every G/L entry which will be created by the posting to see if a posting reference will be used (such as for posting tax in connection with an invoicing). If a posting reference will be used, Maconomy retrieves the account number and any other dimension values to use when posting the entry.

Maconomy checks to see if each value is identical to the value specified on the original entry, then performs the dimension derivation using the same process as when updating an existing entry (described above).

## When Derivations Do Not Occur as Expected

### Multiple G/L Entries

Sometimes, multiple G/L entries are created from the same entry. When this happens, Maconomy first transfers all dimension values from the original entry, then finds the relevant posting references for each of the entries created, and then perform the derivation as described above.

### Customer or Vendor

In some cases, dimension derivation is not made from the current customer or vendor, even though a customer or vendor is specified in the window in which the registration is made and customer or vendor is specified as a priority in the Dimension Derivations window. This occurs because derivation from customer or vendor only takes place when the customer or vendor number is specified directly on the registration.

For instance, if you enter a vendor invoice in the tab of the Invoice Allocation window, you must enter the number of this vendor, which in turn causes Maconomy to derive dimensions from this vendor if a priority is set. However, if you create or change an allocation line in the sub-tab you do not specify a vendor number, since the line relates to the vendor in the tab. Then, since the vendor number is not specified on the line, no dimensions are derived from the vendor.

### Date-Specific Derivations

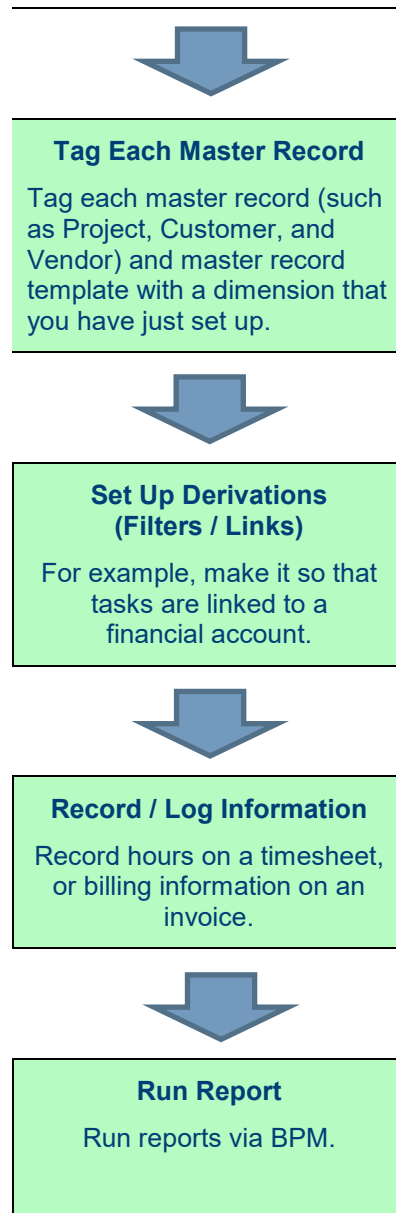
At times a derivation may not occur as expected if a time period is established for the derived dimensions for this value.

## Workflow

This section discusses a high level view of the general process of using dimensions and related activities. The following are the high-level tasks to accomplish with Dimensions.

### **Set Up Dimensions (Search Criteria)**

When you set up a job, you  
can link it to a customer  
and project type.



## Set Up Dimensions

### BPM Reporting

#### Single Dialogs » General Ledger » Set-up

A dimension field can be completed with a default value, a manually entered value, or with a “derived value.” Dimension values not entered manually, through derivation, or through a registration code, are filled in with standard dimension values from the System Parameters window.

**Note:** See the [Derivation](#) section for more details on that topic.

Dimensions and derivations are intended for BPM Reporting. For core Maconomy reporting functionality, see [Maconomy Reporting](#).

To set up dimensions, complete the following tasks:

- **Review available dimensions** and determine your company's needs.
- **Set up common (global) dimensions** via the dimensions-related workspaces (such as Location, Entity, and so on).
- **Set up company-specific (local) dimensions** via the Local Specification 1 through Local Specification 10 workspaces.
- **Create default values** in the System Parameters workspace, and ensure that all dimensions fields have values for all dimensions in use.
- **Set up dimension “short-cuts”** such as dimension combinations and registration codes.

**Note:**

- If a dimension is required, the dimension must either be entered manually or derived. A required dimension will not be filled in automatically with the value of the standard dimension. You may, however, enter the standard value manually.
- You must enter values for all dimensions before posting a G/L entry.

## Review Available Dimensions

To set up dimensions, you must first review the categories available, and decide on which dimension you would like to report

Consider both global and local dimensions, as follows:

- **Global Dimensions** — Use global dimensions to set up search criteria that apply to reporting needs company-wide, such as your departments and offices.
- **Local Dimensions** — Use local dimensions to set up search criteria that are specific to a certain area of your company, such as a Chart of Accounts for only the New York City office.

Though you can use dimensions for any type of category meaningful to your company, within any one particular dimension, you should only enter one category of information. When dimensions are used consistently, they can be attached to each G/L entry, thus creating the basis for statistics where the G/L entries are sorted by these categories.

## Set up Global Dimensions

### Single Dialogs » General Ledger » Set-Up

The 10 dimensions below are considered Global Dimensions. For more information about dimensions and the 12-dimensional chart of accounts, please see “Introduction to the G/L Module.”

If you want to derive other dimensions from the ones listed below, you must specify them in the related window. See Deriving Dimensions for details.

## Dimensions

**Note:** In the table below, the Description column indicates only the recommended use for each dimension. However, you can customize this as needed. Your use of dimensions reflects the way your company chooses to view its financial data.

Dimension	Description
Company	You can identify your entities or company structure using the Company dimension, by creating a new company for each entity in your organization. You may also include consolidating companies. This dimension must be used for your entities and cannot oftentimes be repurposed.
Account	You can identify your various GL accounts using the Account dimension. This dimension must be used for your chart of accounts and cannot be repurposed.
Location	Use this window to create the locations you want to refer to when the Location dimension is used in Maconomy's other windows.  For example, you might use "location" to indicate company offices in different regions, such as New York City and London, or departments within a company, such as Sales and IT. Therefore you may choose to purpose the Location dimension as "Office" or "Department".
Entity	Use this window to create the items you want to refer to when the Entity dimension is used in Maconomy's other windows.  Oftentimes, our customers will use the Entity dimension to identify the Department to which their Employee belongs to, for departmental reporting by employee.
Project	Use this window to create the project values you want to refer to when the Project dimension is used in Maconomy's other windows.  For example, you may choose to identify the various project types or service types that you provide as an organization (i.e. if you are a CPA firm you may have projects delivered Estate Tax, Individual Tax, and Corporate Tax, as such each of these values would be in the Project dimension list.
Purpose	Use this window to create purposes you want to refer to when the Purpose dimension is used in Maconomy's other windows.  This is just another means for you to identify one of those 'lens' in which to view your business. For example, perhaps your Location dimension is your Project Department, your Entity dimension is your Employee Department, the Project dimension is Service Type, then perhaps the Purpose dimension is Project Office, or another relevant tag.
Specification 1-10	Use this window to create other values you want to refer to when the Spec. 1 (or 2, 3, etc.) dimension is used in Maconomy's other windows.  One such example is Client Industry. To support Industry reporting, you could use the Spec. 1 dimension as Industry and thereby generate full P&L reporting to show how profitable your company is in Manufacturing, versus Health Care industries that you service.

## Set up Local Dimensions

### Single Dialogs » General Ledger » Set-Up

Local dimensions are different from global dimensions in that instead of dimension values you can create dimension lists, each of which contains a number of dimension values. Each dimension list can be attached to one or multiple companies. Only those dimension values that are part of the dimension list attached to a company are available to the particular company. You can create a structure list for each dimension list.

There are three local dimensions that can be assigned to a particular company within the larger organization.

Dimension	Description
Local Specification 1 – 10	<p>Use this window to create other values you want to refer to when the Spec. 1 (or 2, 3, etc.) dimension is used in Maconomy's other windows.</p> <p>For example, your company may have a common / consolidated Chart of Accounts which uses global dimensions, and also local Chart of Accounts that uses this entry.</p>

## Create Default Values

### Single Dialogs » Set-Up » Set-up » System Parameters

After you have created all of your set dimensions, if needed, set alternative default values in the System Parameters workspace. Search "Standard" and then enter default values in each of the Standard [Dimension] parameters.

**Note:** Maconomy assigns a predefined default value to the unused dimensions, and assigns derived or manually entered values to the dimensions that are in use.

## Companies Not Using Dimensions

If your company does not use dimensions, go into this workspace and create one value for each dimension that you are not using. Use a dash ("-"), which you may already find in your standard system.

## Set up Dimension "Short-Cuts"

### Dimension Combinations

#### Single Dialogs » General Ledger » Set-Up » Dimension Combinations

Use the Dimension Combination workspace to create dimension combinations. In the tab, enter a name for the dimension combination. Then, for each dimension you can specify a dimension value to be applied when the dimension combination is used.

Use the sub-tab to set up information if you want the dimension combination to derive a different value, depending on which company makes the actual entry. On each line, enter a range of company numbers and a value for one or more dimensions. The values you enter are used instead of the values specified in the tab part when a company within the specified range enters information when the current dimension

combination is used. In case the company which is making the entry is not included in the specified range of companies, the information in the tab is used.

When you are going to use dimension combinations as a Posting Reference, select the **Overwrite** field for all dimensions for which a value is specified. This ensures that the specified dimension values are always applied when using this posting reference.

To create multiple standard dimension groupings for a given type (such as account groupings for Balance Sheet, P&L, and Cash Flow), create an option list for account grouping and create options (for example, Balance Sheet, P&L, and so on) and then specify these on the dimension groupings of using the *Account* type.

## Company-Specific Dimensions

Use the tab portion of the Dimension Combinations workspace to set up company-specific dimension values. On every line of the sub-tab, you can enter a range of company numbers. Additionally, you can enter a value for each dimension and specify if the value should overwrite any existing dimension value.

Use the lines in the sub-tab for exceptions to the dimension values in the tab. For example, if you create an entry on an activity, the combination of the company specified on the entry and the activity itself determines which values are retrieved from the dimension combination.

**Note:** The **Overwrite** field for a given dimension is always retrieved from the same location as the dimension value. This means that if the dimension value is retrieved from the sub-tab of a dimension combination, the value of the **Overwrite** field is also retrieved from the sub-tab of the dimension combination.

## Registration Codes

### Single Dialogs » General Ledger » Set-Up » Registration Codes

Set up registration codes in the Registration Codes workspace. You can use registration codes in the General Journal, Purchase Orders, Vendor Invoices, Invoice Allocation, and Invoice Reconciliation workspaces.

## Tag Each Master Record

After you set up dimensions, you need to “tag” a dimension to each master record that you would like to report on, such as employees, customers, and projects.

Following are some examples of common master records to tag with dimensions.

**Note:** Where to tag each master record depends on your view / layout. The following screenshots are samples only.

**Employees** — You may want to report by employee department, so use a dimension to tag on each Employee record in your system. For instance, use the Executing Department dimension to identify that an employee belongs to the “Admin” department, or perhaps a billable service line such as “Consulting,” “Management,” “Audit Services,” and so on.

## Dimensions

Employees x

Employees Lookup Setup

Show: Sean Williams (1001)

Employee Information Users Positions Skills Compensation Agreements Stock Option Agreements Submit Create Vendor Submit Vendor

**Employee Information**

Employee No. 1001

Sean Williams

6699 12th Street North

Address 2

55128 Boston

Address 3

United States

State MA

Initials

Gender

Date of Birth

Age

Soc. Security No.

☒ Sales Employee

☒ Client Manager

Position Partner

Employee Status Salary

Primary Category 14

Engagement Price Group No. 14

Approver Group

☐ Transfer to People Planner

**Employment**

Date Employed 12/1/2011

Termination Date

☐ Blocked

Notice Date 1/1/2011

Retirement Date

Retirement Age

**Contact Information**

Phone (651)407-5818

Phone 2 (651) 501-0735

Mobile

Mobile 2 (651) 335-4959

E-mail cpacompanyone@Deltek.com

**Contact Person**

Contact Person No. 1001

**Outlay Settlement**

Vendor Sean Williams (E-1001)

**Key Dimensions**

Company	CPA Company One	100
Executing Department	Attest & Assurance	1000
Client Manager (History)	Sean Williams	1001

**Related Employees**

Supervisor Fay Miller 1004

Proxy Annie Leonard 1003

Mentor

Absence Approver Fay Miller 1004

**Document Archive**

Document Archive Description Number

**Access Level**

Access Level Description Name

**User**

Created 11/7/2014 by Administrator

Changed 11/7/2014 by Administrator

Version 3

**Customers** — You may want to use Maconomy to report on how well you are servicing your industries, and where your firm is thriving and struggling. You can do this by tagging a dimension to each Customer record. For instance, you can use the Specification1 dimension and name it “Industry Segment.” Then, on each customer record, choose an industry such as “Manufacturing,” “Healthcare,” and so on.

Clients x

Home Lookup Reports

Show: Acme Cleaning (20000)

Overview Information Sub Clients Documents Contact Persons Opportunities

**Ship to Client**

Client No. 20000

Acme Cleaning

33 Central Avenue

Address 2

19046 Rockledge

Address 3

Address 4

Attn. F. Raymond James

State PA

Phone

Fax

Telex

E-mail RaymondJames@AcmeCleaning.com

Contact Person

Our Contact Name Number

Termination Date

Currency USD

Giro

Client Manager Sean Williams 1001

**Settling Company**

Company No.

Name

Base Currency

**Bill to Client**

Client No. 20000

Acme Cleaning

33 Central Avenue

19046 Rockledge

Attn. F. Raymond James

State PA

Phone

Fax

Telex

E-mail RaymondJames@Acme...

**Parent Client**

☐ Insert Below Parent In Hierarchy

Client No. TemplateCustomer

Name TemplateCustomer

Linking Rule 3

**Hierarchy**

Level 1 Acme Cleaning (20000)

Level 2

Level 3

**Dimension Combination**

Dim. Comb. No.

**Derived Company**

Company No. Value Overwrite

**Derived Dimensions**

	Value	Overwrite
Engagement Department		<input type="checkbox"/>
Executing Department		<input type="checkbox"/>
Service Type		<input type="checkbox"/>
Client Manager (History)	1001	<input type="checkbox"/>
Industry	10	<input type="checkbox"/>
Spec. 2		<input type="checkbox"/>
Spec. 3		<input type="checkbox"/>
Local Spec. 1		<input type="checkbox"/>
Local Spec. 2		<input type="checkbox"/>
Local Spec. 3		<input type="checkbox"/>

**Projects** — You may want to use Maconomy to report on departmental profitability according to the services you provide. In this case, you can tag each Project in your system with a dimension. For instance, use the Responsible Department dimension to identify to which department a project belongs, such as “Consulting,” “Tax Services,” “Audit Services,” “Wealth Management,” and so on.

## Dimensions

The screenshot shows the Deltek Engagements application interface. The top navigation bar includes tabs for Home, Budgeting, Billing, Lookup, Reports, Closing, and Setup. Below this is a sub-navigation bar with tabs for Overview, Details, Client Billing Address, Tasks, Prices, and Documents. The main content area is divided into several sections:

- Engagement Reporting:** Includes fields for Engagement (Accounting support), Client (Acme Cleaning), Company (CPA Company One), Engagement Department (Attest & Assurance), Service Type (Agreed Upon Procedures), and Industry (Construction/Real Estate).
- Registration Details:** Includes fields for Engagement Group, Task List, Invoice Layout, Detailed Invoice Specification, Invoiceable, Standard Text, PO Number, and Year.
- Service Description:** Includes a Start and Ending date range.
- Engagement Restrictions:** Includes checkboxes for Recurring, Blocked for, Time Registrations, Expense Registrations, Budgeting, Billing, Blanket Invoice, and Resource Planning.
- Engagement Fee:** Includes fields for Contracted, Budgeted, and Approved Realization.
- Previous Change:** Includes a table showing changes to the engagement.

## Set Up Derivations

### Set up Global Derivations

To use derived dimensions, you need to:

- Set up the derived values
- Assign a priority to each value

To specify the value that you want to derive globally (from each job, activity, and so on), use the Derived Dimensions island in the workspace where the information card is created and maintained. For example, if you want to derive a value from a job, use the Derived Dimensions island in the Jobs workspace. If a dimension value is derived, you no longer need to enter a value manually in the field. Maconomy automatically transfers the derived value from elsewhere.

### Assign a Priority

You must tell Maconomy the order in which the derived values should be sorted on the report. Do this by assigning a priority number (where priority 1 is the highest). Assign highest priority to the value that you enter most often.

If you set up a priority for a derivation, the values for the derivation are used instead of the default values when this dimension is used. Maconomy checks for every dimension derivation with assigned priorities, whether one or several derived dimension values are specified to be transferred to the other dimension fields in the new entry. You can enter a priority for each value, but you would typically only enter priorities for the first few.

### Set Up Date-Dependent Derivations

As an additional option, you can set up derivations so that they occur only within a set time period. If you create a period-specific set of derived dimension values (such as employee works out of a particular office for three months), the values to derive from that employee are retrieved from the Derived Dimensions window.

In the Derived Dimensions window, each dimension value, job, employee, and so on, can be set up to derive one set of dimension values in one period and another set of values in another period.



**Note:** You cannot set up a date-dependent derivation of company numbers.

## Example

If employee Hugo Rune is changing from office A to office B on May 1, 2015 due to a move, you can create two sets of derived dimensions:

- One that is valid *until* April 30, 2015 and derives location A.
- One that is valid *from* May 1, 2015, and going forward and derives location B.

Each time that you add or update an entry where information must be derived from Hugo Rune, Maconomy will use the entry date of the entry to determine which of the two sets of dimension values apply.

Instead of creating period-specific sets of derived dimensions, you could change the information in the Derived Dimensions island in Hugo Rune's information card. However, with that approach, any subsequent entries back-dated to before May 1 will use the new, updated information (location B) rather than the correct value of location A.

Use the Derived Dimensions window to set-up and use date-dependent derivation.

## Set-Up Derivations by Company and / or Transaction Type

Previously, the rule for dimension derivation was defined in the Dimension Derivation window as a global setting. If you need to derive dimensions based on company and/or transaction type (rather than global setting) use the Dimension Derivation Selection window. The tab has a default dimension derivation name and a user island. The sub-tab has a target group with a Company No., a Transaction Type Group No., and a Period, and the Dimension Derivation Name. You can create dimension derivation principles and remove them as needed, as well as reset dimensions before rederivation.

This set-up dialog is used when you make a registration. The system searches in the table part until it finds a line that matches the registration, and then it uses the dimension derivation priorities from that line. Maconomy then uses the default dimension derivation name from the tab of the dialog, if no lines match the current registration.

## People Planner Integration

Deltek's People Planner is an application that combines graphical project and resource planning for your entire resource pool and project portfolio on a company-wide scale.

You can integrate People Planner with the Maconomy application so that the graphical planning capabilities are combined with the advanced project economy management features of Maconomy.

The suite of People Planner programs includes the following:

- **Deltek People Planner** — Sometimes called the “People Planner Client,” although it is not strictly a client because there is no server. It is sometimes just called “People Planner,” which can cause some confusion as to whether the reference is to the Deltek People Planner product or the entire suite of programs.
- **People Planner Admin Tool** — A tool used to perform the initial setup and maintenance of People Planner.
- **Deltek MyPlan** — A light web page client.
- **Deltek People Planner API** — A web service used to integrate People Planner with the Deltek Maconomy software.
- **Deltek People Planner Outlook Web Service** — A web service used to integrate People Planner with Microsoft® Exchange® and Outlook®.
- **Deltek People Planner Outlook AddIn** — An add-in for Outlook. The People Planner Outlook Web Service, the People Planner Service, and this add-in form the components of the integration between People Planner and Exchange/Outlook.
- **Deltek People Planner Service** — A Windows service that is responsible for scheduling tasks.

### People Planner Admin Tool

Use the People Planner Admin Tool for the initial setup and maintenance. This tool enables you to create and maintain the People Planner database, add People Planner users, and create the configuration files used by the People Planner client.

### Integration with Microsoft Outlook

The [integration with Exchange/Outlook](#) enables People Planner to use Outlook, instead of the People Planner client, as your personal planning tool.

### Integration with Maconomy

You can use People Planner as a stand-alone resource planning tool; however, it can also be [integrated with Maconomy](#). This integration enables the People Planner client to import master data from Maconomy that is relevant for project and resource planning.

The Resource Management workspace allows access to the People Planner Capacity Overview page from within the Workspace Client. The workspace enables you to access and control data based on the People Planner access you are granted.

Enter the People Planner URL in the system parameter, **URL for Capacity Overview**, otherwise, the Resource Management workspace is hidden.

People Planner can be integrated with Maconomy X1 Service Pack 16 or later; or with Maconomy 2.0.

**To enable the Resource Management Workspace:**

1. Go to **Setup » System Setup » Parameters and Numbers » System Parameters**.
2. Double-click the **URL for Capacity Overview** parameter.
3. In the System Parameter sub-tab, enter the People Planner URL in the **URL for Capacity Overview** field.
4. Restart Maconomy.

**Fields / Descriptions**

Field	Description
URL for Capacity Overview	<p>The URL of the People Planner Capacity Overview page. The general form is:</p> <pre>http://&lt;server&gt;:&lt;port&gt; /PeoplePlannerWebComponents /AssignResourcePage.aspx</pre>

**Periodic Job Budget System Parameters**

The following system parameters configure how the **Update Periodic Job Budget from People Planner** and **Send Job to and Update Periodic Job Budget from People Planner** actions behave.

- **Update Periodic Job Budget Planned Dates on update from People Planner** – updates the Planned Starting Date and Planned Ending Date when Update Periodic Job Budget from People Planner or Send Job to and Update Periodic Job Budget from People Planner actions are invoked.
- **Submit Periodic Job Budget on update from People Planner** – submits the budget when **Update Periodic Job Budget from People Planner** or **Send Job to and Update Periodic Job Budget** from People Planner actions are invoked.

The system parameters are enabled by default. Deselect the system parameter to disable it.

**To configure the Periodic Job Budget System Parameters:**

1. Go to **Setup » System Setup » Parameters and Numbers » System Parameters**.
2. Double-click the **Update Periodic Job Budget Planned Dates on update from People Planner** parameter.
3. In the System Parameter sub-tab, select the **Update Periodic Job Budget Planned Dates on update from People Planner** field.
4. Click on **Show Filter List**.
5. Double-click the **Submit Periodic Job Budget Planned Dates on update from People Planner** parameter.
6. In the System Parameter sub-tab, select the **Submit Periodic Job Budget on update from People Planner** field.

## Fields / Descriptions

Field	Description
Update Periodic Job Budget Planned Dates on update from People Planner	Updates the job budget planned dates after clicking the <b>Update Periodic Job Budget from People Planner</b> or <b>Send Job to and Update Periodic Job Budget from People Planner</b> actions. Enabled by default.
Submit Periodic Job Budget on update from People Planner	Automatically submits the budget after clicking the <b>Update Periodic Job Budget from People Planner</b> or <b>Send Job to and Update Periodic Job Budget from People Planner</b> actions. Enabled by default.

## Capacity Overview Tab and the People Planner Tab

The Resource panels user interface are renamed Capacity Overview and People Planner in the Jobs workspace:

- In **Jobs » Budgeting » Budget**
- In **Jobs » Budgeting » Periodic Budget**
- In **Jobs » Budgeting » Job Planning**
- In **Jobs » Progress Evaluation**

The following labels are updated:

Old User Interface Label	Updated User Interface Label
Capacity Overview	Resource Assignment
People Planner	Resource Booking

## Additional Fields Sent to People Planner

In the Resource Assignment tab, the following additional fields required by the **Assign to Budget** action are sent to People Planner:

- Employee Category No.
- Line Type
- Budget Type
- Job Number

Changing any of these fields in an open job automatically sends the updates to People Planner.

## Create Standard People Planner Integration User

The PSO Solution configuration is enhanced to improve support for the People Planner integration. The access granted to the People Planner Integration user (using the import files) meet the minimum requirements for integration to function properly.

However, in order to test the integration using the Test Integration Settings in the People Planner Admin Tool, you need to provide temporary Read access for the People Planner Integration user to the System Parameters container.

## Periodic Job Budget Action

The **Send Job to and Update Periodic Job Budget from People Planner** action supports the previously-used action sequence to send the job to People Planner and then update the Periodic Job Budget on the job.

The following are recommendations for usage:

- Use **Update Periodic Job Budget from People Planner** when the Periodic Job Budget has to be updated from People Planner but does not have to be updated in People Planner.
- Use **Send Job to and Update Periodic Job Budget from People Planner** when the Job Budget has to be updated in People Planner before the updates are retrieved for the Periodic Job Budget.

## System Architecture

People Planner is based on Microsoft technology and is, in essence, a .Net application. The users can choose a Windows or a web-based client. The Windows client offers significantly more functionality over the web client. The Windows Client is primarily used by Resource Managers and Project Managers, whereas the web client is used by the individual employees (resources). It is possible to configure a People Planner installation where everybody uses the Windows client, allowing the web client to be optional.

**Warning:** It is not possible to deploy a People Planner solution without the Windows client, because all of the resource management functionality resides in that client.

People Planner uses Microsoft's SQL Server for data storage and communicates directly with this from the client.

Administrative users log in to People Planner with a local account on the People Planner database server. Users get logged in automatically through their Windows user account.

When configured with a Web client interface, this is handled by Internet Information Server (IIS).

While People Planner can operate as a standalone solution, it typically interacts with the following external systems:

**ERP** — Projects are usually created in the ERP system, such as Delttek Maconomy, where they are assigned appropriate metadata (Project Number, and so on). The project's baseline budget is also established there. After the project and the baseline budget are created in the ERP back end, they can be copied into the People Planner database, so that the resource management workflow can begin (resource assignments, and so on). People Planner can retrieve the information from the ERP system by reading a CSV/XLS file generated by that system, or through direct SQL access to the ERP database. Both of these methods can run on a scheduled basis through a scheduler tool.

People Planner can also deliver information back to the ERP system, such as budget updates, changes to project completion dates, and so on.

**Microsoft Exchange** — When People Planner is integrated with Exchange, users can see People Planner bookings (made by the Project Managers) in their Outlook appointments. The integration with Exchange is done via the EWS Exchange Web Service.

**Microsoft Excel** — People Planner can export data to Excel for further manipulation.

**Microsoft Project** — People Planner can export a project to a Microsoft Project compatible file and also import Microsoft Project files as new People Planner projects.

**BI** — People Planner can deliver data to a Business Intelligence (BI) system for further analysis.

This is typically done on a database level.

The following information describes the logical tiers that are depicted in the following illustration.

People Planner's tiers are all logical tiers, which can be collapsed or allocated to as many physical servers as needed by your firm. Those determining factors are discussed in more detail as part of the sizing planning section of this document and can include user concurrency, location, access expectations, and business needs.

## Absence Management Overview

Maconomy's Absence Management is a feature that enables employees to manage their own absences, admin to configure a company's settings, and management to review and approve employee absences and requests. Simple wizards streamline functionality and processes. Color-coded calendars make it easy to see absence type at a glance. Different views let employees and supervisors see a full year view as well as detailed break-down as needed.

Absence Management has three workspaces that enable you to accomplish three main processes:

- Manage your own absences
- Manage your employee's absence requests, and configure absence information
- Configure your company's absence setup and workflow
- Setup system-wide absence parameters

## Workflow

The following are the high-level tasks to accomplish with Absence Management.

Task	User	Details...
Manage Absences	Employee	<ul style="list-style-type: none"> <li>▪ Register and view your own absences or make an absence request.</li> <li>▪ You can also register and view for any employee for whom you are set up as "secretary."</li> </ul>
Approve Absences	Absence Approver	<ul style="list-style-type: none"> <li>▪ View existing requests from your team members.</li> <li>▪ Approve or reject absence and allowance requests.</li> </ul>
Year-End Process	Human Resources (HR)	<ul style="list-style-type: none"> <li>▪ Perform year-end processes.</li> </ul>
Workflow Setup	Administrator	<ul style="list-style-type: none"> <li>▪ Setup teams and calendars for your company.</li> <li>▪ Setup absence workflow for your company (such as what type of absence days are allowed).</li> </ul>
System Setup	System Administrator	<ul style="list-style-type: none"> <li>▪ Setup absence management system-wide (such as whether or not you will require approvals in the absence workflow) via system parameters.</li> </ul>

## General Process

In general, employees request absences by creating a request with the start and end dates, and type of absence (such as vacation). An absence approver is notified of such a request, and they can approve or reject the request, and give a reason.

Employees have a certain number of allowed absence days in a vacation period, and they can only make request time that is available in a period. However, you can disable this for specific absence types, such as sick leave. Also, at any time, a manager can adjust the available allowance for an employee.

Employees can request that more days are added to their allowance, and such requests go through an approval process. This functionality is configurable for each absence type.

Users can view an overview of booked absence using color-coded calendar views (such as yearly view and team view). Absence of certain types, such as illness, can be hidden from public view, while still indicating that the employee is absent. Managers can also see a detailed history of changes to each employee's allowance, including when days have been booked, granted, or rejected, and for what reason.

## General Process for Setup

The following is a general process for using absence management functionality:

1. **Determine global parameters** you will enact system-wide for your company.
  - Some questions to ask: Will we require approvals in the workflow? Do we want absence information automatically registered in time sheets? Will we allow employees to edit their absence information?
  - See Workflow Setup and System Setup for details.

**Warning:** The system parameter for Absence Approval is selected by default. However, be aware that deselecting this parameter disables integration to time sheets and control of absence allowances. See System Setup for details.

2. **Configure the workflow** of absence management for your company.
  - You can “batch adjust” various items and processes, including allocating vacation time for a period.
  - *Use the Absence Administration workspace for this step.*

## General Process for Everyday Use

1. **Employees request absences** and view their overall absence information as needed.
  - *Use the Absence workspace for this step.*
  - A notification is sent to the approver.
2. **Absence approvers accept or reject the request.** They can view all employee absence information as well as overall team absence information to help make the decision.
  - *Use the Absence Approval workspace for this step.*
  - A notification is sent to the employee.



## Color Coding and Absence Types

The Calendar used in absence management shows color-coded days. The colors are setup for each absence type separately. For example, Vacation can be blue, Illness red, Leave green, and so on.

The default setup is that all absence types are shown with the same colors, but with different colors for each approval status. For all absence types, Open is gray, Submitted is yellow, Approved is green and Rejected is red.

Your Absence Administration can change the colors on your system, as well as set up restricted absence types in the Absence Setup workspace.

## Notifications

Notifications for requesting and approving absence quickly inform the relevant employees when action is needed. Notifications come as Workspace Client To-Dos. Email notifications can also be configured.

The following notifications are included:

- **Approve Absence** — Appears for the absence approver to indicate that an absence request is submitted and awaits approval. It also indicates the relevant request in the Absence Approval workspace.
- **Approved Absence** — Appears for the absence requester to indicate that the absence request is approved. It also indicates the relevant request in the Absence workspace.
- **Rejected Absence** — Appears for the absence requester to indicate that the absence request has been rejected. This notification will point to the relevant request in the Absence workspace.
- **Submit Allowance Request** — Appears to alert employees that they have created but not submitted an allowance request.
- **Approve Allowance Request** — Similar to “Approve Absence,” but for Allowance requests.
- **Approved Allowance Request** — Similar to “Approved Absence,” but for Allowance requests.
- **Rejected Allowance Request** — Similar to “Rejected Absence,” but for Allowance requests.

## Importing Data

Maconomy imports for:

- Absence Types
- Teams
- Vacation Calendars and Vacation Periods
- Employee Absence Entries

The last import program makes it possible to set and maintain allowance balance for employees for that team.

## Manage Absences

**User: Employee**

**Use this workspace: Absence**

Employees use the Absence workspace to easily create and submit absence requests for approval, and view their own available and booked absence time. This workspace contains all relevant information for

the current employee, including the employee's absence allowance, and used, carried forward, and remaining days for the selected vacation period for each of the relevant absence type.

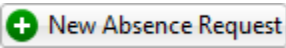
Using the Secretary Role tab to have all the above functionality for employees for whom the user is secretary as well.

This workspace enables the following processes:

- Creating and submitting a new absence request
- Creating and submitting allowance requests (such as requests for additional time-in-lieu)
- Viewing an overview of the employee's own absences and team absences
- Viewing approved and rejected absence requests

## Create / Submit Absences

Use the Absence Requests sub-tab to create a new absence request, specifying the number of days, the absence type, and a reason for the absence, such as illness.

Click  to create new absence request. Click **Create** to create the request.

**Note:** Use the Secretary tab to create / submit absence requests for employees for whom you are secretary.

Edit the request as needed in the Request Details sliding panel.

## Create / Submit Allowance Requests

Employees create and submit allowance requests if they need to add absence time to their available pool of time. For example, if employees put in extra hours on a project, they might ask for compensation of those hours as time-in-lieu, and they can state the reason in their remarks on the request. After the request is submitted, it is approved or rejected. If it's approved, the approver can put restrictions on the allowance, such as that the newly allowed time-in-lieu day is only available for the next two weeks.

**Note:** An *allowance request* is different from an *absence request*. The former will add days to the employee's pool of available absence, while the latter is used to book an actual absence period.

Use the Allowance Requests sub-tab to create a new allowance request, specifying the number of days, the absence type, and a reason for requesting this allowance. For example, request five time-in-lieu days with a reason as well as the job number for a project on which you work.

Click  to create a new allowance request. Click **Create** to create the request.

Once the request is submitted, a notification is sent to the absence approver, who can either approve or reject the request. If the absence is approved, the requested number of days is added to your pool of available days for the chosen absence type. You can then book absence for a period using those days in the Absence Requests tab.

Edit the request as needed in the Request Details sliding panel.

## View Absences

Employees can also see an overview of their available and booked absence time to help them gauge when is the best time for a planned absence.

The Absence tab shows an employee's absence allowance, as well as used, carried forward, and remaining days for the selected vacation period for each relevant absence type.

There are numerous ways you can view your absences and requests:

- **Color-coded calendar** at the top of the Absence workspace shows an at-a-glance snapshot of absences for the month as:
  - Approved (green)
  - Rejected (red)
  - Pending (yellow)
- **Absence Request Sub-Tab** has a **Show** filter which shows which absence requests have been approved or rejected, or other statuses.
- **Year Overview Sub-Tab** shows a color-coded calendar with details about your absences for the entire vacation year.
- **Team Overview Sub-Tab** shows a list of employees that share a team with the current employee. One team at a time is shown. Each employee's absence for the selected month is shown in the form of a color-coded calendar. This helps you plan when you can best schedule planned absences.

**Note:** Periods of absence with absence types marked as restricted are shown using the private color coding.

## Approver Absences

**Users: Absence Approvers**

**Use this workspace: Absence Approval**

Approvers use the Absence Approval workspace to review, approve or reject absence requests and allowance requests submitted by employees.

When an absence request is approved, Maconomy verifies that the employee has enough absence allowance available to cover the request, if the system is set up to do so. It then deducts the booked number of days from the employee's allowance. Allowance is always deducted first from absence entries that are next to expire.

**Note:** An absence approver is specified individually for each employee on the Employee tab.

This workspace enables the following processes:

- View existing absence requests from their team members.
- Approve or reject absence and allowance requests.
- Comment on employee absence requests, and asked for modifications / resubmissions as needed.

## View Existing Requests

Approvers can view existing request from team members, as well as absence history in order to evaluate absence approval.

The following views are available:

- **Employees Tab** provides a view into the absence requests, allowance requests and allowance details and history for a selected employee.

**Note:** This tab shows the same information as the Absence tab in the Absence workspace.

- **Monthly Overview Tab** shows a list of employees for whom you are designated as an absence approver. Select a month in the top tab (defaults to the current month), and then the Calendar table shows a list of employees with absence for that month, shown using color-coding of table cells.
- **Absence Requests Tab** shows a list of absence requests relevant for the absence approver

## Approve / Reject Absence Requests

Approvers can approve or reject absence requests (as well as allowance requests) in the Absence Approval workspace. The Absence Requests sub-tab shows a list of absence requests for employees for whom the current user is designated as absence approver.

Once an absence request is selected, the Absence Request shows the details of this request, which correspond to the content of the Request Details sliding panel in the Absence workspace.

Use the actions within the **Absence Request sub-tab** to approve or reject the request. A warning displays if the period being approved is over a certain number of days (configured for each vacation period).

## Approve / Reject Allowance Requests

Approve or reject allowance requests for employees asking to add absence time to their available pool of time.

Select the allowance you are going to approve or reject. Once a request is selected, the Allowance Request sub-tab shows the details of this request, such as the number of requested days, the absence type, and the reason for this request. Use the actions within the **Allowance Request sub-tab** to approve or reject the request.

A warning displays if the period being requested is over a certain number of days (configured for each vacation period).

**Note:** An *allowance request* is different from an *absence request*. The former will add days to the employee's pool of available absence, while the latter is used to book an actual absence period.

## Modify Absence Requests

### Request Details Sliding Panel

To modify absence requests, use the Request Details sliding panel. This panel includes a calculated number of working days, based on the Week Calendar selected for this employee. This is the value that is

deducted from the employee's balance when the request is approved. For example, a period of seven days might correspond to five working days (the weekend being excluded by the Week Calendar setup). This can cover proper handling of bank holidays, part-time employees, and so on.

## Year-End Process

**User:** *Human Resources*

**Use this workspace:** *Absence Administration*

You can view and modify the balance of available absence hours for each employee on both a per employee basis and in batch mode.

## View and Modify Allowance Hours

You can view and modify the balance of available absence hours for each employee on both a per employee basis and in batch mode, as follows:

- Use the **Employee Balance** tab for more involved adjustments. Here you can view a list of absence entries for a selected employee, view the history of changes to an employee's balance of absence days. You can also see when the allowance was granted, how many days have been carried forward, and if there have been any adjustments to the balance and for what reason.
- Use the **Periodic Balance** tab for simpler adjustments for both per-employee and batch mode adjustments. This tab allows you to easily increase or decrease allowance as you type.

## Assign Initial Allowance

Use the **Periodic Balance tab** to assign an initial allowance for a new period and transfer remaining days from the previous period to the new period (carry forward functionality).

## Absence Entries

Absence entries are records used for keeping the balance of available and used absence days for each employee. Each change in the balance is represented by its own absence entry, which makes it possible to track the whole history of events for every employee.

Absence entries are created automatically when absence or allowance requests are approved. They can also be created manually, and are created in an "unsubmitted" state and do not affect the employee's balance until they are submitted and approved.

There are four types of absence entries – Allowance, Carry Forward, Absence and Allowance Request.

Use the **Absence Entries sub-tab** to create new absence entries of type Allowance. This either increases the employee's balance (positive allowance) or decreases it (negative allowance). Allowance entries must be submitted and approved to take effect.

## Workflow Setup

**User:** *Administrator*

**Use this workspace:** *Absence Setup*

The absence administrator or Human Resources administrator uses the Absence Setup workspace to set up vacation calendars, absence types, and employee teams.

## Vacation Calendars

Absence is managed on a periodic basis. Each employee is assigned a vacation calendar (global or company-specific) which defines periods (calendar years from January to December, or other periods, such as fiscal periods, running from the beginning of May to the end of the following April) where absence accounting takes place. At any time before or during a period, a “year-end” process can be performed or adjusted, granting, in batch mode, an initial allowance to employees and transferring days from the previous period to the next one. Balance can also be imported using standard Maconomy import functionality.

Vacation calendars are used to define periods in which absence can be booked. A vacation period can correspond to a calendar year (such as from January to December) or cover an arbitrary period (such as the beginning of May to end of following April), depending on how vacation is managed in a given company. A vacation calendar can be global or company-specific.

Vacation calendars also hold certain settings which determine how allowance and booking will be handled. These are defined for each period separately.

Use the **Vacation Calendars tab** to add or modify existing vacation calendars.

## Absence Types

Absence types (such as vacation, illness, time-in-lieu) are maintained on the **Absence Types sub-tab**.

### Restricted Absence Types

You may choose that some types of absence are not visible to all employees.

For example, you may want employees to be able to book Illness without having that status visible to other employees.

In addition to the colors on an absence type, the absence type can be marked as Restricted.

When this field is selected, other employees cannot see the colors defined on the absence type when looking at your absence. Instead they will see the color defined on the vacation calendar that you are using.

For example, say Vacation = blue, Illness = red, and Leave = green. If Illness (shown in red) is marked restricted, then other employees looking at your absence won't see red. They will see the color defined on your vacation calendar, which could be blue, hiding your Illness as Vacation.

The general rule is that if you are logged in as the employee you are viewing absence for, or as the supervisor, secretary, absence approver of that employee, or you have the permission “Can Approve/Reject Absence” (which is setup in the window Actions in the Setup module for each user individually), then you will see the “true” color.

Otherwise, you will see the “restricted” color taken from the vacation calendar.

In addition to the above rule, in Team Overview you can also see the “true” color for all employees in a team if you are marked with “Can See Absence for Team” in the Teams window.

Select the **Restricted** check box on the **Absence Types tab** to restrict a particular absence type, such as illness.

## Employee Teams

Teams are used in absence management to define a grouping of employees that display together in Team views. Only teams marked for use with absence management are available for selection in those views. Maintain teams on the **Teams tab**.

Team members can see each other's absence, unless it is of a "restricted" absence type, which instead shows with a "restricted" color. However, some (or all) employees on a team can be granted permission to see even "restricted."

To grant this access, use the **Can See Absence for Team** field on the **Team Members** sub-tab.

## System Setup

*User: System Administrator*

*Use this workspace: System Setup*

System administrators can setup system-wide parameters to control workflow, establish whether absences integrate with timesheet, and allow employees to edit timesheet lines.

Within **Setup » System Setup » Parameters and Numbers**, search on \*Absence to get the list of four parameters related to absence management setup.

Toggle these parameters to suit the needs of your company, as follows:

- **Allow Editing of Absence Time Sheet Lines** — Select this option to allow editing of absence time sheet lines. Deselect to turn the editing capability off.
- **Absence Approval** — Select this to enable an absence approval workflow. Deselect to allow submissions without approval.

**Warning:** Disabling the Absence Approval parameter also disables the functionality related to time sheet line integration (and overrides the other three parameters in this section) and absence allowance management, leaving a very basic absence management functionality.

- **Automatically Create Time Sheet Lines from Approved Absence** — Select to automatically create time sheet lines from an approved absence, and enable the synchronization of absence management and time sheets. Deselect to enter the time sheet lines manually.
- **Require Complete Absence Derivation Setup upon Absence Approval**

## Advanced Costing

The Advanced Costing feature includes numerous improvements to the usability and flexibility of employee compensation setup as well as calculating gross pay data for salary systems based on this setup.

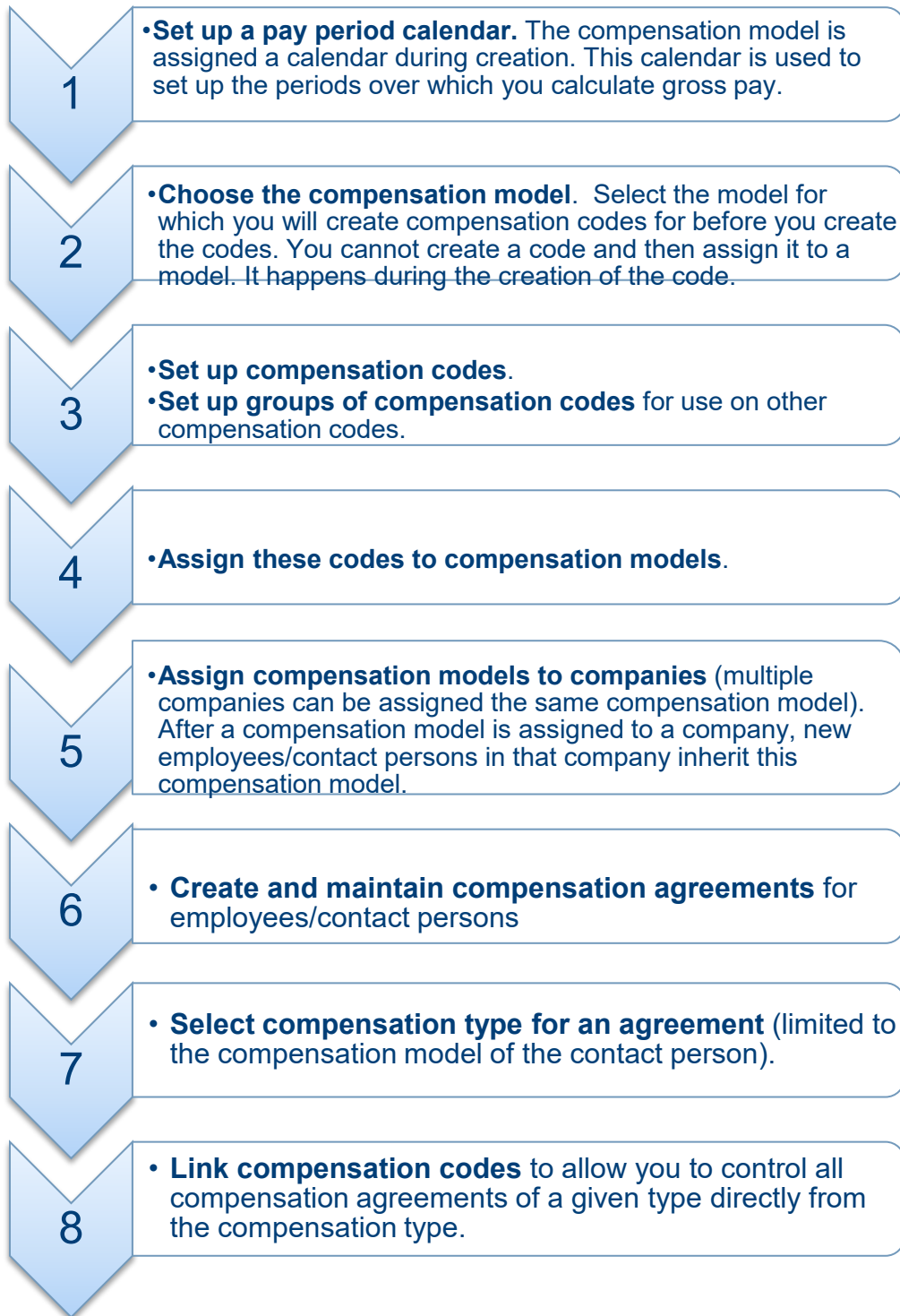
Large companies have the requirement to be able to specify the employee overhead cost rate as a percentage and to maintain this at a higher level than at each individual employee. Some companies group their employees into a number of categories with respect to overhead cost and want to specify overhead cost as a percentage for each combination of this category and company. This category differs from the employee category. For example, a consultant might work out of the office and another might work at customer site and might therefore have different overhead cost.

In addition, large companies have the need to store compensation related details including base salary, gross and hourly pay, hourly cost, pay periods and pro rata with thresholds and limits, all assigned at the employee level, which is facilitated now with the use of enhanced compensation agreements.

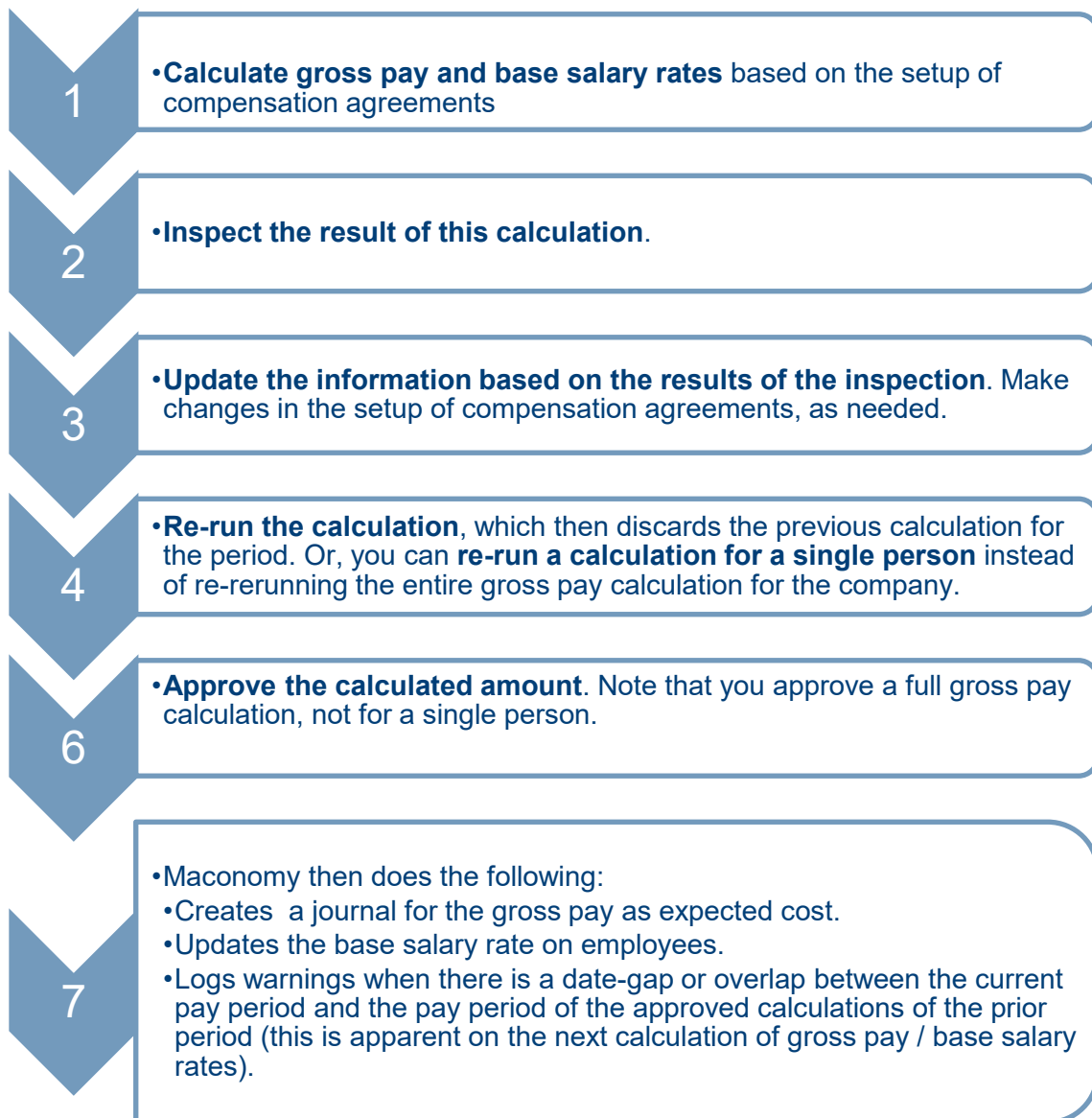


## Workflow

### Compensation Code Setup



## Compensation Process



## Gross Pay Calculation

### Gross Pay Calculation Period

The pay period calendar is used to define the gross pay calculation periods. Gross pay is calculated for a period which is specified by a pay period calendar, with a start date and an end date covering a number of months which default to 1.0, but which can be changed. For example, if you enter a start date of August 26, then the end date defaults to September 25.

To calculate gross pay, (**N**) denotes the length of the pay period of the compensation agreement, (**A**) denotes the amount of the Agreement, and (**M**) is a variable for the number of months in the calculation period (1.0 if the calculation period is 1 month). For gross pay, **M** is determined by the length of the period as defined in the pay period calendar.

Gross pay for the agreement is:

$$M * A / N.$$

For example, the gross pay for an agreement with a pay period of 2 months within a calculation pay period of 1 month is half of the amount per period as of the agreement.

### Calculation Pay Period and Effective Period

The calculation of gross pay operates with two periods: the calculation pay period (**P**) specified for the calculation, and an effective period for each agreement. The effective period (**E**) consists of all dates within the calculation pay period that fall within the employment period and the period specified on the agreement. Agreements with an empty effective period do not contribute to the calculation of gross pay.

When the effective period **E** is the same as the calculation pay period **P**, the gross pay for the given agreement is the amount  $M * A / N$  as described in the above section. Otherwise the amount is adjusted using one of the following eight methods:

1. None  $M * A / N$
2. Period, Fixed time  $M * A / N * F(E) / F(P)$
3. Period, Calendar days  $M * A / N * C(E) / C(P)$
4. Period, Week days  $M * A / N * W(E) / W(P)$
5. Period, Working days  $M * A / N * W2(E) / W2(P)$
6. Day, Calendar days  $A / N * 12 / 365 * C(E)$
7. Day, Week days  $A / N * 12 / 260 * W(E)$
8. Day, Working days  $A / N * 12 / D * W2(E)$

where

A = amount on the compensation agreement

B = annual amount =  $A / N * 12$ .

P = pay period

E = effective period

M = number of months in pay period

N = number of months in period of the compensation agreement

F = fixed working time in a given period

C = calendar days in a given period

W = week days in a given period

W2 = days with working hours in a given period

G = Days with fixed work hours in a year =  $W2(\text{week})$

D = Days with fixed hours in a year =  $G * 52$ .

Note:  $A / N$  is the monthly amount.

For example, you are employed starting Monday, September 5 (2016) and the payment period is August 26–September 25. So, E = September 5–25. The agreement is \$5,000 per month and your fixed working time is 7.5 hours Monday – Friday. Then  $F(E) = 7.5 * 15 \text{ days} = 112.5 \text{ hours}$ ,  $F(P) = 7.5 * 21 \text{ days} = 157.5 \text{ hours}$ , and the result for each of the methods is:

1. \$5,000
2.  $\$5,000 * 112.5 / 157.5 = \$3,571.43$
3.  $\$5,000 * 21 / 31 = \$3,387.10$
4.  $\$5,000 * 15 / 21 = \$3,571.43$
5.  $\$5,000 * 15 / 21 = \$3,571.43$
6.  $\$5,000 * 12 / 365 * 21 = \$3,452.05$
7.  $\$5,000 * 12 / 260 * 15 = \$3,461.54$
8.  $\$5,000 * 12 / (5*52) * 15 = \$3,461.54$

## Overall Gross Pay Calculation

The overall gross pay is determined by calculating the gross pay of a contact person for each compensation agreement for a given pay period. Results are then stored for future calculations.

Only agreements marked for inclusion in gross pay are included, though in some cases, compensation for the prior period may be included (see below).

- **For agreements with an amount**, the gross pay for the agreement is calculated using the method above.
- **For agreements with a percentage**, the gross pay is calculated as the percentage of the total gross pay for the agreements belonging to the specified compensation group.

As mentioned above, it becomes possible to specify a simple rule for when to exclude an agreement from the gross pay calculation, namely agreements for which a specified percentage of the total gross pay for a group of agreements does not fall within a specified range.

**Note:** This calculation fails if there are circular references in the setup, such as a code A which is 5% of a code B which is 3% of code A itself, which cannot be resolved to an amount.

For percentage calculations, an upper bound can be applied, as specified on the agreement. As mentioned above, you can specify a simple rule for when to exclude an agreement from the gross pay calculation, namely agreements for which a specified percentage of the total gross pay for a group of agreements does not fall within a specified range.

When calculating the gross pay of an agreement as a percentage of the gross pay for agreements belonging to a group, you only compute the percentage for the periods where the effective period of the percentage agreement overlaps the effective period of each of the group agreements. This is done by scaling down the gross pay of the group agreement according to the percent of overlap between the two agreements. Here the pro rata method of the group agreement is used to decide the method for calculating the percentage of period overlap. The method for each pro rata method is as followed:

1. Overlap = 100%
2. Overlap =  $F(E_{12})/F(E_2)$
3. Overlap =  $C(E_{12})/C(E_2)$
4. Overlap =  $W(E_{12})/W(E_2)$

5.  $\text{Overlap} = W2(E_{12})/W2(E_2)$
6.  $\text{Overlap} = C(E_{12})/C(E_2)$
7.  $\text{Overlap} = W(E_{12})/W(E_2)$
8.  $\text{Overlap} = W2(E_{12})/W2(E_2)$

Where  $E_{12}$  denotes the effective period of overlap between the percentage agreement and the group agreement, while  $E_2$  denotes the effective period of the group agreement.

## Gross Pay for Prior Period

As it will be possible to calculate gross pay for a period before the end of that period, there may be changes after a calculation of gross pay that affect the gross pay calculation. Two types of changes necessitate the inclusion of gross pay for the prior period in the calculation of gross pay:

- If the termination date of an employee has changed compared to what it was at the time of the calculation of gross pay for the prior period, then the difference is included.
- If an employee was not included in the gross pay calculation for the prior period for the company and compensation model of the employee, then the additional days of the prior period will be included.

### Example 1

Prior period is August 26–September 25 and gross pay is calculated September 15. Two days later, on September 17, the termination date of an employee is changed from September 20 to October 31. The calculation of gross pay for the subsequent period for this employee will then include the difference between a new gross pay calculation for August 26–September 25 minus the existing, approved calculation for August 26–September 20. (Note that this is not necessarily the same as calculating gross pay for September 21–25 as compensation agreements can have upper limits on percentage calculations.)

### Example 2

Prior period is August 26–September 25 and gross pay is calculated September 15. Two days later, on September 17, a new employee is set up in Maconomy with employment start date the same day. The calculation of gross pay for the subsequent period for this employee will include gross pay for September 17–September 25.

### Limitations

The calculations of gross pay and base salary rate only support compensation agreements with a pay period in months, such 1.0 month, not pay periods in days or hours.

The result of the calculations of gross pay and base salary rate is stored so that it can be reviewed, edited (manually or through import) and exported. However, changes to the calculated amount are manual since Maconomy does not re-apply logic such as recalculating the result for agreements that are percentages of other agreements when you change the result for those other agreements.

## Base Salary Rates

You can now calculate base salary rates in batch for all employees within a target group for a given date range, the payment period. Base salary is calculated in the same way as gross pay described above. The calculation includes only employees whose period of employment overlaps with the pay period. The calculation of base salary disregards period of employment.

**Tip:** You can specify which agreements to include in the base salary rate independently from gross pay. The result of the calculation of base salary are stored separately from the gross pay amount. The base salary *rate* is found as base salary divided by the fixed working time as specified on the employee.

With the current limitations the amounts on compensation agreements are specified for pay periods in months. Base salary rate is calculated as yearly base salary (monthly amount times 12) divided by the yearly fixed working time, which will be calculated as 52 times the weekly fixed working time as specified on the employee.

## Posting of Gross Pay

Post the calculated gross pay amount after the gross pay calculation is approved. Maconomy posts the gross pay amount for each employee, with the standard dimension derivation, so that dimensions can be derived from the employee, or the company of the employee.

Quick facts about posting:

- Automatic posting upon approval of gross pay calculation.
- Postings are made on the employees.
- Posting options:
  - G/L
  - Job Cost
  - Job Cost if job specified
  - Compensation type specific posting options
- Overall posting options on are on the compensation model
- Posting options on compensation types take precedent over the options listed on the model

The posting principle is specified on the compensation type. Maconomy supports four posting principles:

- None: The amount is not posted.
- G/L: The amount is posted to the posting reference specified on the compensation type. You can specify a job number, activity number, and task name on either the compensation type or the compensation agreement. The specified values is transferred to the finance entry for information.
- Job Cost: The amount is posted to the job, activity, and task specified on the compensation agreement. You can specify a job, an activity, or a task on the compensation type. The user must specify the missing information on the compensation agreement.
- Job Cost if job specified: The amount is posted to the job, if a job is specified on the compensation agreement. The amount is posted on the posting reference specified on the compensation type, if no job is specified on the compensation agreement.

The offset amount can be posted to the offset posting reference on the compensation type if one has been specified. Otherwise the offset amount is posted to the offset posting reference specified on the compensation model.

Additionally, you can specify an offset company on the compensation type. Maconomy posts the offset amount on this company if a company is specified, and otherwise on the company of the employee.

Maconomy posts the offset amount to the offset posting reference specified on the compensation model, if an offset posting reference is not specified on the compensation type. Maconomy creates one offset entry for all compensation types without a compensation type-specific posting reference.

## Bi-weekly Payroll Calculation Support

### Pro Rata and Base Salary Rate Method Updates

The **Pro Rata Method** field for compensation agreements is no longer mandatory for all agreements. It is only mandatory for agreements with a month-based time unit. The Pro Rata Method field on Compensation Agreement and the Base Salary Rate method on Compensation Model are only used to respectively calculate the gross pay and the base salary rate for agreements with a time unit measured in months. They have no impact on agreements with daily or hourly time units.

### Payout Days for Compensation Agreements

A new field called **Payout Days** is added to the Compensation Agreement workspace. This specifies the days of the week on which an daily or hourly-based compensation agreement pays out. You can specify either calendar days (all days of the week), week days, weekend days, calendar working days (calendar days with fixed working hours), week working days (week days with fixed working hours) or weekend working days (weekend days with fixed working hours).

You can set up agreements with the same start and end dates but with different amounts and for different days of the week. For example, you can create an agreement with a greater amount for weekend days than one that covers weekdays.

The new field is mandatory for compensation agreements with daily or hourly time units. It is not required for agreements with a monthly time unit.

### Custom Weekend Days

Seven new fields are added to Compensation Model to specify which days are considered weekend days. These fields are added to accommodate country-specific weekend days, which vary by geographic region. You can use these custom days with gross pay calculation and base salary rate calculation by specifying which days Maconomy should consider weekend days.

When calculating gross pay or base salary rate, the pro rata methods and payout days now use these new fields on their respective compensation model to determine if a given day of the week is a weekend day or a week day.

By default, compensation models are set up to use Saturday and Sunday as weekend days as these days match the most widely-used weekly calendar.

### Gross Pay for Compensation Agreements with Day-based Time Units

This enhancement allows Maconomy to support daily time units on compensation agreements. It also allows for different Payout Day options, including calendar days, weekdays, weekend days, calendar working days, week working days, and weekend working days.

For supporting daily time units on compensation agreements, we let the amount (A) on a compensation agreement be the amount paid out for every agreement pay period of N whole days. For a calculation period (P) of M days, we have that the effective period (E) consists of all dates within the calculation period that fall within the employment period and the period specified on the agreement. Agreements with an empty effective period will not contribute to the calculation of gross pay. We thereby have  $E \subseteq P$ .

For the effective period E we let D(E) denote the number of days with payout in the effective period, where D is defined by the "Payout Days" field on the agreement.

The gross pay for compensation agreements with daily time unit and of calculation type amount is calculated using the following method:

$$A / N * D(E)$$

Where

A = Amount on the compensation agreement.

E = Effective period.

D = Days with payout in the given period.

N = Number of whole days in the pay period of the compensation agreement.

Note here that A / N is the daily amount.

Gross pay example:

You are employed starting Monday, January 9 (2017) and the calculation period is January 1 – January 31. We then have that E = January 9–31. Suppose that the agreement is €100 per day and your fixed working time is 8 hours Tuesday–Saturday. The result for each of the different Payout Day options are as followed:

1. Calendar days:	$€100 / 1 * 23$	= €2300
2. Week days:	$€100 / 1 * 17$	= €1700
3. Weekend days:	$€100 / 1 * 6$	= €600
4. Calendar working days:	$€100 / 1 * 16$	= €1600
5. Week working days:	$€100 / 1 * 13$	= €1300
6. Weekend working days:	$€100 / 1 * 3$	= €300

## Bi-Weekly Payroll Cycles

To setup a bi weekly payroll cycle you must first setup a 14 day (2 weeks) time unit in system setup, which can be used to specify the number of days in the agreement pay period. Next, you must create a compensation agreement with the pay period field set to the newly created 14 days time unit.

Gross Pay Example:

You are employed starting Monday, January 9 (2017) and the calculation period is January 1 – January 31. We then have that E = January 9–31. Suppose that the agreement is €1400 per 14 days (Bi weekly) and your fixed working time is 8 hours Tuesday–Saturday. The result for each of the different Payout Day options are as followed:

1. Calendar days:	$€1400 / 14 * 23$	= €2300
2. Week days:	$€1400 / 14 * 17$	= €1700
3. Weekend days:	$€1400 / 14 * 6$	= €600
4. Calendar working days:	$€1400 / 14 * 16$	= €1600
5. Week working days:	$€1400 / 14 * 13$	= €1300
6. Weekend working days:	$€1400 / 14 * 3$	= €300



## Calculation of Group Agreements with Day-based Time Units

Compensation agreements using a percentage-based calculation type are defined as a percent of the sum of the amounts of a group of selected compensation agreements. The amount contributed by each group agreement is dependent on the percent of overlap between the percent agreement and the group agreement.

$E_1$  denotes the effective period of the percent agreement and  $E_2$  is the effective period of the group agreement with a time unit measured in days, and which pay out days are defined by  $D_2$ . We let the overlapping effective period between the agreements be defined as  $E_{12} = E_1 \cap E_2$ , and  $O_{12}$  be the percent of overlap between the effective periods of the percent agreement (1) and the group agreement (2).

For the cases where the time unit of the group agreement is measured in days, the following method to measures the overlap. It is dependent on the payout days of the group agreement:

$$\text{Overlap} = D_2(E_{12}) / D_2(E_2)$$

If there is no overlap between the effective periods of the two agreements, the result is zero.

## Gross Pay for Compensation Agreements with Hour-based Time Units

Maconomy calculates compensation agreements using hourly time units in a similar fashion to day-based time units. Gross pay of agreements with a day-based time unit uses the "Payout Days" field to specify which days of the week the agreement pays out in order to compute the gross pay amount.

To find the number of working hours for an employee in the calculation period, Maconomy uses the fixed working time field. This specifies the fixed working hours for each day of the week.

The gross pay for compensation agreements with hourly time unit and of calculation type amount is calculated using the following method:

$$A / H * F(D(E))$$

Where

- H = Number of whole hours in the pay period of the compensation agreement.
- F = Number of Fixed Working hours in the given period.
- A = Amount on the compensation agreement.
- E = Effective period.
- D = Days with payout in the given period.

Note here that  $A / H$  is the hourly amount of the agreement, and that  $F(D(E))$  denotes the fixed working hours for the days with pay out (D) in the effective period (E).

Gross Pay Example:

You are employed starting Monday, January 9 (2017) and the calculation period is January 1 – January 31. We then have that  $E$  = January 9–31. Suppose that the agreement is €20 per hour and your fixed working time is 8 hours Monday–Saturday. The result for each of the different Payout Day options are as follows:

- |                           |   |         |
|---------------------------|---|---------|
| 1. Calendar working days: | $€20 / 1 * 8 \text{ hours} * 20 \text{ days}$ | = €3200 |
| 2. Week working days:     | $€20 / 1 * 8 \text{ hours} * 17 \text{ days}$ | = €2720 |
| 3. Weekend working days:  | $€20 / 1 * 8 \text{ hours} * 3 \text{ days}$  | = €480  |

## Calculation of Group Agreements with Hourly Pay Periods

For cases in which the time unit of group agreements is measured in hours, overlap is measured similar to group agreements with a daily time unit. In cases where there is no overlap between the effective periods between the two agreements, the result is zero.

$$\text{Overlap} = F(D_2(E_{12})) / F(D_2(E_2))$$

Where

F = Number of Fixed Working hours for the payout days in the given period.

D<sub>2</sub> = Days of payout in the given period, using the payout days of the group agreement.

E<sub>1</sub> = Effective Period of the percent agreement.

E<sub>2</sub> = Effective Period of the group agreement.

E<sub>12</sub> = Effective Period overlap between the percent agreement and the group agreement.

If there is no overlap between the effective periods of the two agreements, the result is zero.

## Base Salary for Agreements with Daily and Hourly Pay Period

Base salary for agreements with a time unit measured in days or in hours is calculated in the same way as gross pay as described above. These calculations do not make use of the base salary method specified on the compensation model for calculating the base salary.

The base salary calculation uses the same restrictions as the existing base salary rate calculation for agreements with a monthly time unit. The calculation only includes employees whose employment period overlaps the calculation period.

## Threshold and Limit for Base Salary Rate Calculation

For base salary calculation, it is possible to set up limits and thresholds both annually and for a pay period. The term "limit" specifies how much an agreement can pay out and is an upper cap, whereas "threshold" specifies a lower limit.

This is calculated using the following formula:

$$L_{YC} = L_Y / 364 * D(C)$$

$$T_{YC} = T_Y / 364 * D(C)$$

Where

L<sub>YC</sub> = Annual limit as scaled down to the calculation period

L<sub>Y</sub> = Annual limit of the agreement.

D(C) = Number of days in the calculation period.

T<sub>YC</sub> = Annual threshold as scaled down to the calculation period.

T<sub>Y</sub> = Annual threshold of the agreement.

For scaling down the pay period threshold and limit, the period length of these two fields on the compensation type and agreement are specified by the default period length on the pay period calendar used by the compensation model, for which the compensation agreement belongs to. If this field is left blank, a period length of 1 month is assumed.

To scale down the pay period limit and threshold to match the calculation period of the base salary calculation we use the following formulas:

$$L_{PC} = L_{YP} / 364 * D(C)$$

Where

$L_{PC}$  = Pay period limit as scaled down to the calculation period.

$L_{YP}$  = Annual pay period limit.

Here the annual pay period limit ( $L_{YP}$ ) is given by the pay period limit scaled up to cover a year. To calculate this value, different functions are used depending on whether the default period length of the pay period calendar is specified in months or days.

If the default period length of the calendar is specified in months, the following function is used:

$$L_{YP} = L_P * 12 / M$$

Where

$L_P$  = Pay period limit as specified on the agreement.

$M$  = Default period length of the pay period calendar measured in months.

If the default period length of the calendar is specified in days, the following function is used instead:

$$L_{YP} = L_P * 364 / P_D$$

Where

$P_D$  = Default period length of the pay period calendar measured in days.

For calculating the pay period threshold for the calculation period of the base salary rate calculation, similar methods are used:

$$T_{PC} = T_{YP} / 364 * D(C)$$

$$T_{YP} = T_P * 12 / M \quad \text{If default period length of the calendar is specified in months.}$$

$$T_{YP} = T_P * 364 / P_D \quad \text{If default period length of the calendar is specified in months.}$$

Where

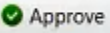
$T_{PC}$  = Pay period threshold scaled down to the calculation period.

$T_{YP}$  = annual pay period threshold.


$T_P$  = Pay period threshold as specified on the agreement.



## Set Up Compensation Codes

This section shows you how to perform a simple compensation code setup, including minimum field suggestions. Numerous variations are possible for more complicated variations.


**Note:** When working in various compensation workspaces, you must save changes via  Approve rather than through typical **Save**.

## Set up Pay Period Calendars

1. Go to **Human Resources » Employees » Setup » Pay Period Calendars**.
2. Click , then enter a name and description on the Create Pay Period Calendar wizard. Click **Create**.

3. Add a calendar year. In the Calendar Year sub-tab, click , then add a **Calendar Year Start** date, such as 01-01-2017. The **Calendar Year End** date defaults to span a year.
4. The Pay Period sub-tab displays with month-long pay period start and end dates listed. Click  to accept the default of 12 pay periods of one month each.


## Set up Compensation Model

1. Go to **Human Resources » Employees » Setup » Compensation Models » Compensation Model**.
2. Click  **New Compensation Model**, and in the Create Compensation Model wizard, enter the following information, then click **Create**:
  - a. Name and Description.
  - b. In the Pay Period Calendar field, assign a calendar to this model.

**Note:** You can change the calendar as long as you have not yet entered calculations using the compensation model.

- c. In the **Base Salary Method** field, select which pro rata method to use for base salary rate calculations.
3. *Optional Step:* If you want to set up posting rules, on the Compensation Model tab, in the **Posting Reference, Offset** field, select the needed Dimension Combination number, then click **OK**.
4. Enter information in the remaining fields in this workspace as needed, including Currency, and Pay Period. **Note:** If you create a Compensation Type right from the sub-tab, it will inherit information from the Compensation Model.
5. Click **Save** when done.

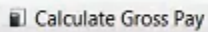
## Set up Compensation Type

1. Go to **Human Resources » Employees » Setup » Compensation Models » Compensation Types**.
2. Click  **New Compensation Type**, then enter a name and description on the Create Compensation type wizard. Click **Create**, then select the type to display it.
3. On the Compensation Type tab and island, select the **Mandatory Agreement** check box to create a related agreement automatically when this type is used.
4. If you would like this compensation type to be used only by specific employees, in the **Selection Criterion Specification** field, select a specification group, or use the related action to create a new one as needed.
5. In the **Default Linking Rule** field, select the needed linking rule if you would like this compensation type updated for specific updates.
6. In the **Allowance / Deduction** field, select Allowance.
7. In the **Pay Period** field, select the payout period for this compensation type, such as Month to indicate once a month.

8. In the Value Limits island, select a Currency to use with this type, as well as Minimum and Maximum monetary amounts to include as a price range, as needed.
9. In the Calculation island, in the **Period, Pro Rata** field, select Period Fixed Time.
10. Select the **Incl. in Gross Pay** and **Incl. in Base Salary Rate** check boxes.

## Calculate Gross Pay to Use in Payroll Systems

Calculate gross pay for all employees with a specified compensation model for a certain period.

1. Go to **Human Resources » Gross Pay Calculations » Calculation » Calculate Gross Pay**.
2. In the Selection Criteria island, select the **Compensation Model** and **Company No.** used in this calculation.  
**Note:** You can choose multiple companies by entering a range of company numbers by providing a start and end number in the two **Company No.** fields.
3. In the Calculate island, select the **Calendar Year**, such as 2017, and in **Calculation Period**, select one of the defined periods in the chosen calendar year, such as 01/01/17.
4. Click  **Calculate Gross Pay**.  
**Note:** If you enter a date range in **Show Results**, this displays certain results in the sub-tab, but has no effect on the calculation.
5. The results display in the Gross Pay Calculations sub-tab. Review as needed to evaluate, such as to see flags in the **No. of Warnings** field.

### To Calculate Gross Pay by Contact Person

To calculate gross pay by contact person, complete the steps above, and then follow these steps:

6. Click on the Gross Pay tab to see details by contact person.
7. Review information on the Gross Pay and Gross Pay Line sub-tabs and make adjustments as needed. For example, if the pay must be adjusted for this calculation, update the **Gross Pay, Agreement Currency** field.

**Note:** You can only have one unapproved Gross Pay Calculation line open at a time, and only one approved calculation change for the same period.

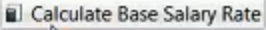
Any changes in the Gross Pay Calculations sub-tab only update this particular calculation, and do not update the overall agreement.

8. Click **Save**.

**Note:** Click  **Recalculate** to undo any changes made to the calculation result, and recalculate the gross pay according to the agreement setup.


## Calculate Base Salary Rate to Use in Payroll Systems

Calculate gross pay for all employees with a specified compensation model for a certain period.

1. Go to **Human Resources » Base Salary Rate Calculations » Calculation » Calculate Base Salary Rate**.
2. In the Selection Criteria island, select the **Compensation Model** and **Company No.** used in this calculation.  
**Note:** You can choose multiple companies by entering a range of company numbers by providing a start and end number in the two **Company No.** fields.
3. In the Calculate island, select the **Calculation Period Start** and **End** dates. The **Calculation Period, Month** field populates with the percentage of a month this range contains.
4. Click .  
**Note:** If you enter a date range in **Show Results**, this displays certain results in the sub-tab, but has no effect on the calculation.
5. The results display in the Base Salary Calculations sub-tab. Review as needed to evaluate, such as to see flags in the **No. of Warnings** field.

## To Base Salary Rates by Contact Person

To calculate gross pay by contact person, complete the steps above, and then follow these steps:

6. Click on the Base Salary Rates tab to see details by contact person.
7. Review information on the Base Salary Rate Header and Base Salary Rate Line sub-tabs and make adjustments as needed. For example, if the base salary must be adjusted for this calculation, update the **Base Salary** field. You can recalculate the results if needed for the chosen employee.
8. Go to the Calculate Base Salary Rate tab, and click .

**Note:** For gross pay calculations, you can only have one approved calculation change for the same period. For base salary rate calculations, you can have multiple approved calculations in the same period, but the employee base salary rate will be the result of the latest calculation.

For both gross pay and base salary rate calculations, you can only have one unapproved calculation for the same models and companies.

The approval updates information on the Base Salary Rates tab, as well as in the related Employee workspace, and Employee Revisions.

## Setup

### Set Up Batch Overhead Maintenance

1. Go to **Human Resources » Employee Overhead Cost Rate Maintenance**.
2. Go to the Employee Overhead Rate Specification Lines sub-tab.
3. Enter criteria in the lines for batch processing. If criteria is entered in columns, it must match employee criteria exactly in order to apply, however the columns without values do not have to match. Then, lines are applied in consecutive order. For example, line 1 is applied first to find matching employees, then line 2, and so on.

4. Go to the Employee Overhead Rate Specification tab and click **Update Employees** action to update employees with the Employee Overhead Specification.

## Create New Overhead Maintenance Specification

1. Go to **Human Resources » Employee Overhead Cost Rate Maintenance**.
2. Go to the Employee Overhead Rate Specification Lines sub-tab.
3. To create a new specification, click **+**, or to base a new specification on an existing specification, click **Copy Overhead**.
4. Enter General information as follows:
  - a. **Name** - Enter the name of the employee overhead specification.
  - b. **Description** - In this free text field, enter a description for the employee overhead specification.
  - c. **Access Level** - Use this field to specify an access level name for specification. This means that this line is only available to users with the access level indicated.
  - d. **Closed** - This field shows if the specification has been closed.
  - e. **Effective From** - Enter the date from which the employee overhead specification should be applied.
5. Click **Save**.

## Change Overhead Manually

### To change employee overhead rate manually:

1. Go to **Human Resources » Employees**.
2. From the filter, select an employee.
3. Go to the Employee Revisions sub-tab.
4. In the **Overhead Maintenance** field, select **Employee Specific**.
5. Go to the Employee Information tab.
6. In the Overhead Maintenance field
7. If overhead rate is a percentage of salary, in the **Overhead Rate %** field, enter the percentage amount, such as 5.
8. If the overhead rate is a set dollar amount, in the Overhead Rate field, enter the amount.




## Change Overhead By Batch

### To change employee overhead rate via batch job:


1. Go to **Human Resources » Employee Overhead Cost Rate Maintenance**.
2. Go to the Employee Overhead Rate Specification tab and click **Update Employees** to update employees with overhead maintained by batch.

## Compensation Code Setup

### Set up Pay Period Calendars

1. Go to **Human Resources » Employees » Setup » Pay Period Calendars**.
2. Click  **New Pay Period Calendar**, then enter a name and description on the Create Pay Period Calendar wizard. Click **Create**.
3. Add a calendar year. In the Calendar Year sub-tab, click , then add a **Calendar Year Start** date, such as 01-01-2017. The **Calendar Year End** date defaults to span a year.
4. The Pay Period sub-tab displays with month-long pay period start and end dates listed. Click  to accept the default of 12 pay periods of one month each.


### Set up Compensation Model

1. Go to **Human Resources » Employees » Setup » Compensation Models » Compensation Model**.
2. Click  **New Compensation Model**, and in the Create Compensation Model wizard, enter the following information, then click **Create**:
  - a. Name and Description.
  - b. In the Pay Period Calendar field, assign a calendar to this model.

**Note:** You can change the calendar as long as you have not yet entered calculations using the compensation model.

- c. In the **Base Salary Method** field, select which pro rata method to use for base salary rate calculations.
3. *Optional Step:* If you want to set up posting rules, on the Compensation Model tab, in the **Posting Reference, Offset** field, select the needed Dimension Combination number, then click **OK**.
  4. Enter information in the remaining fields in this workspace as needed, including Currency, and Pay Period. **Note:** If you create a Compensation Type right from the sub-tab, it will inherit information from the Compensation Model.
  5. Click **Save** when done.

### Set up Compensation Type

1. Go to **Human Resources » Employees » Setup » Compensation Models » Compensation Types**.
2. Click  **New Compensation Type**, then enter a name and description on the Create Compensation type wizard. Click **Create**, then select the type to display it.
3. On the Compensation Type tab and island, select the **Mandatory Agreement** check box to create a related agreement automatically when this type is used.
4. If you would like this compensation type to be used only by specific employees, in the **Selection Criterion Specification** field, select a specification group, or use the related action to create a new one as needed.



5. In the **Default Linking Rule** field, select the needed linking rule if you would like this compensation type updated for specific updates.
6. In the **Allowance / Deduction** field, select Allowance.
7. In the **Pay Period** field, select the payout period for this compensation type, such as Month to indicate once a month.
8. In the Value Limits island, select a Currency to use with this type, as well as Minimum and Maximum monetary amounts to include as a price range, as needed.
9. In the Calculation island, in the **Period, Pro Rata** field, select Period Fixed Time.
10. Select the **Incl. in Gross Pay** and **Incl. in Base Salary Rate** check boxes.

## Approval Hierarchies

In a company, managing the approval of certain transactions is crucial to proper handling. Approvals help ensure that the right person approves a vendor invoice before payment is made, or that more than one person approves a purchase order. Managing the approval process preserves data quality and reduces the risk of fraud.

Maconomy addresses the need for approval procedures with approval hierarchies. An approval hierarchy is a set of rules determining who can approve transactions (an expense sheet, a purchase order, or a vendor invoice and assigned allocation lines that match certain conditions) and the creation of or updates to master data. It provides flexibility by allowing you to customize the approval process.

Hierarchical approvals involve multiple users as part of the approval process according to a specified order. For example, if you set up three levels or hierarchies for a transaction, the users are prompted to give their approval in the order that they are specified in those levels.

If approval procedures must vary between companies in a multi-company set-up, create separate approval hierarchies as needed.

You may opt to apply approval hierarchies only to specific transactions or types of master data. Even if you do not use customized approval hierarchies, each transaction or type of data must go through a specific approval procedure.

Approval hierarchies can be applied to the following types of transactions and master data:

- Purchase order line and header
- Expense sheet line and header
- Vendor invoice line and header
- Job Draft invoice header
- Job budget header
- Time sheet line and header
- Vendor
- Company vendor
- Customer
- Company customer
- Employee
- User information

## Workflow

Use the various tabs and panels in the Approval Hierarchies workspace of the Setup module to set up approval hierarchies and to make changes to existing hierarchies.

Use the workspaces specific to the transaction or type of master data to utilize the approval processes you created.

This workflow provides a high-level discussion of the tasks related to the initial set-up of an approval hierarchy for vendors and the creation of a new vendor.

Task	Frequency	User	Details
Set Up States	Once/Periodically	Admin	Specify the statuses that a new vendor goes through in the approval process. Create these manually.
Set Up an Approval Hierarchy	Once/Periodically	Admin	Set up an approval hierarchy for created vendors.
Create a Vendor	Regularly	Employee	Create a vendor. You may do this by copying template information from a parent vendor.
Approve a Vendor	Regularly	Employee	Approve a vendor for the first status.
Add Vendor Information	Regularly	Employee	Add more details about the new vendor (for example, bank account number).
Approve a Vendor	Regularly	Employee	Approve a vendor for the second status. The vendor reaches the third status, and is now fully approved.

Depending on the set-up, changes to certain vendor information result in the vendor undergoing the approval process again.

The workflows for transactions and other types of master data may differ from the example presented in this document.

## Set Up States

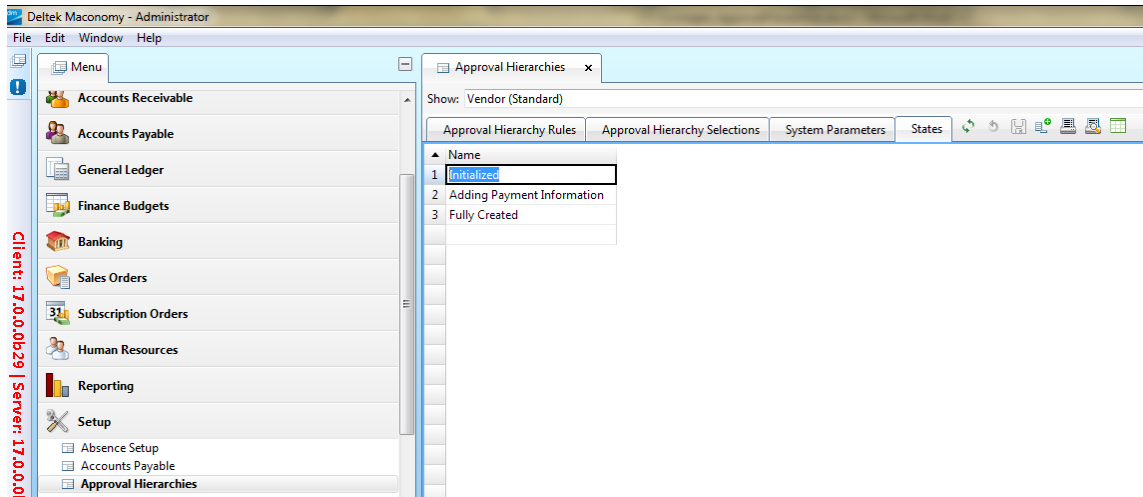
**User:** Admin

**Path:** Setup » Approval Hierarchies » States

Use the States tab to create the statuses any new vendor has to go through before it can be considered fully approved. The following is an example of statuses:

1. Initialized
2. Adding Payment Information
3. Fully Created

## Screenshot



## Notifications

None.

## Set Up an Approval Hierarchy

**User:** Admin

**Path:** Setup » Approval Hierarchies

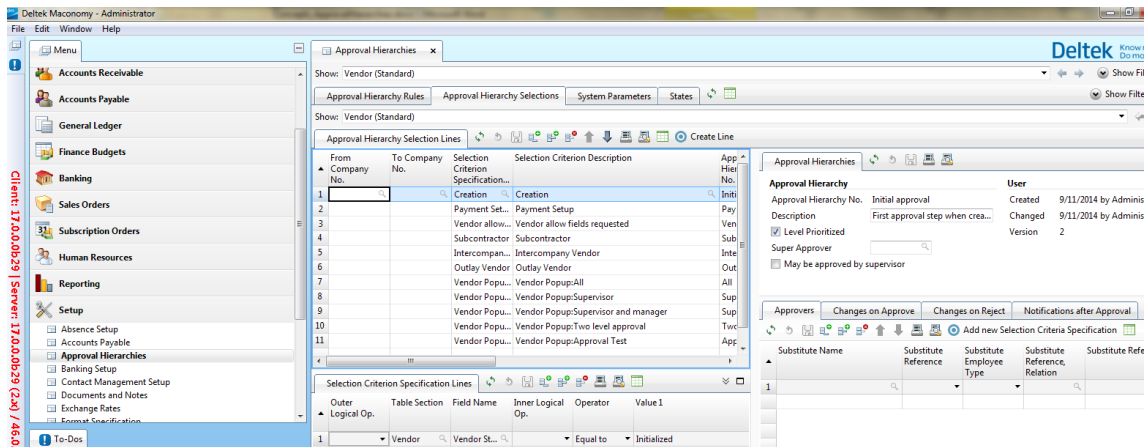
Use the following tabs and panels under the Approval Hierarchy Selections tab to set up an approval hierarchy:

- Use the Selection Criterion Specification Lines and Approval Hierarchy Selection Lines panels to set up selection criteria and specify which ones have to be met by a vendor for each status.
- Use the Approvers panel to specify an approver and a substitute approver for each status.
- Use the Changes on Approve and Changes on Reject panels to specify what happens when a vendor is approved or rejected.
- Use the Notifications after Approval panel to specify the employee who receives a To-Do when a vendor reaches a specific status.

Use the Changes on Change panel under the Approval Hierarchy Rules tab to specify the changes to vendor information which need to go through the approval process again.

## Approval Hierarchies

### Screenshot



### Notifications

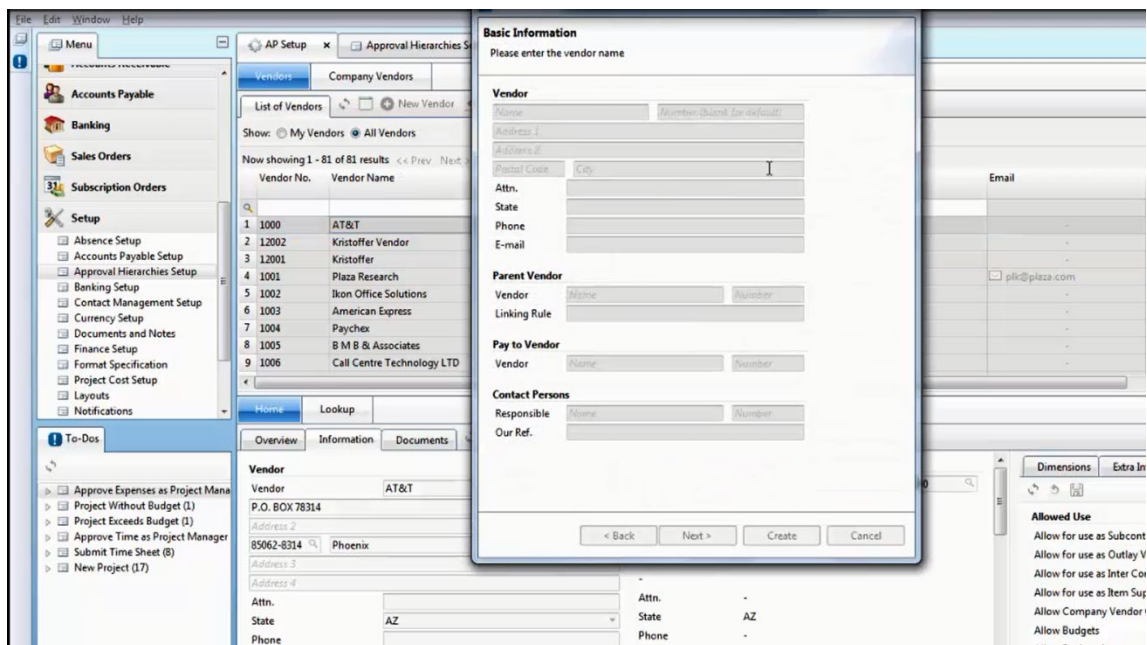
None.

## Create a Vendor

**User:** Employee

Use the Vendors tab of the AP Setup workspace to create a vendor and submit it for the first approval.

### Screenshot



## Notifications

The specified approver receives an Approve Vendor To-Do.

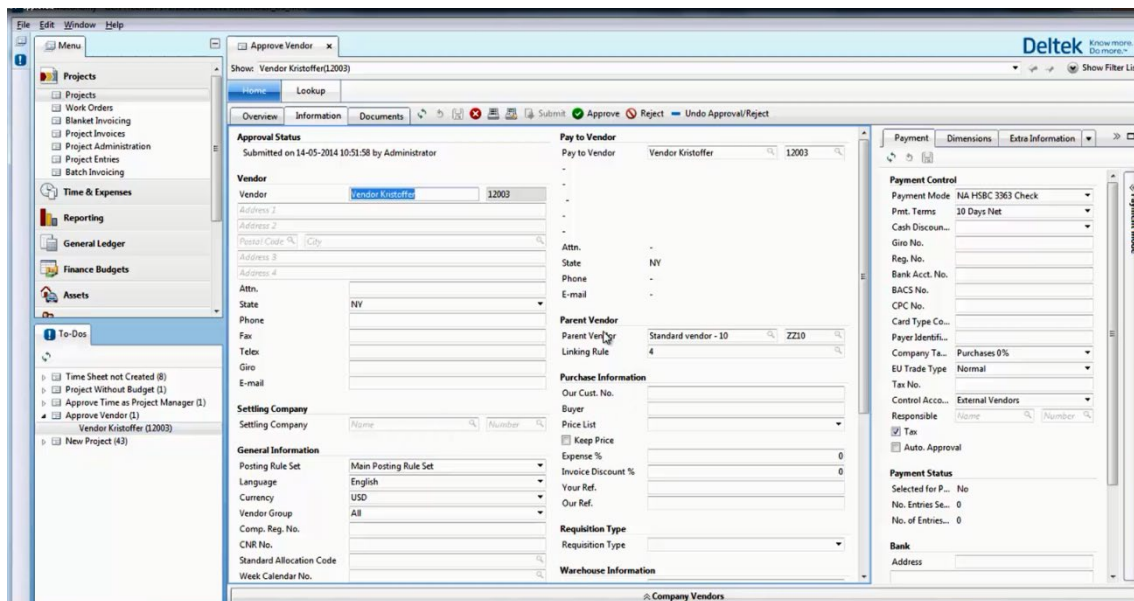
## Approve a Vendor

**User:** Employee

Use the Approve Vendor workspace to approve a vendor, and move it from one status to the next one.

Once a vendor receives approval for the final status, it is considered fully approved. Employees may assign that vendor to all the actions allowed for a fully approved vendor.

## Screenshot



## Notifications

The specified user receives a Submit Vendor To-Do.

## Add Vendor Information

**User:** Admin

Use the Submit Vendor workspace to enter payment information and other details about the new vendor.

## Screenshot

## Notifications

The specified approver receives an Approve Vendor To-Do.

## Setup

Select the **Approval Required** check box under the Approval Hierarchy Rules tab of the Approval Hierarchies workspace to ensure that all transactions and master data go through the specified approval hierarchies.

In addition, perform the necessary procedures for the parameters found in the System Parameters tab of the Approval Hierarchies workspace. The list of system parameters varies, depending on the selected transaction or type of master data.

# Reporting

This section includes the fields and descriptions for the Reporting workspaces.

## Introduction to Reporting Structures

The workspaces in the Reporting submenu allow you to set up any number of hierarchies or structures to be used in your Maconomy Universe reports.

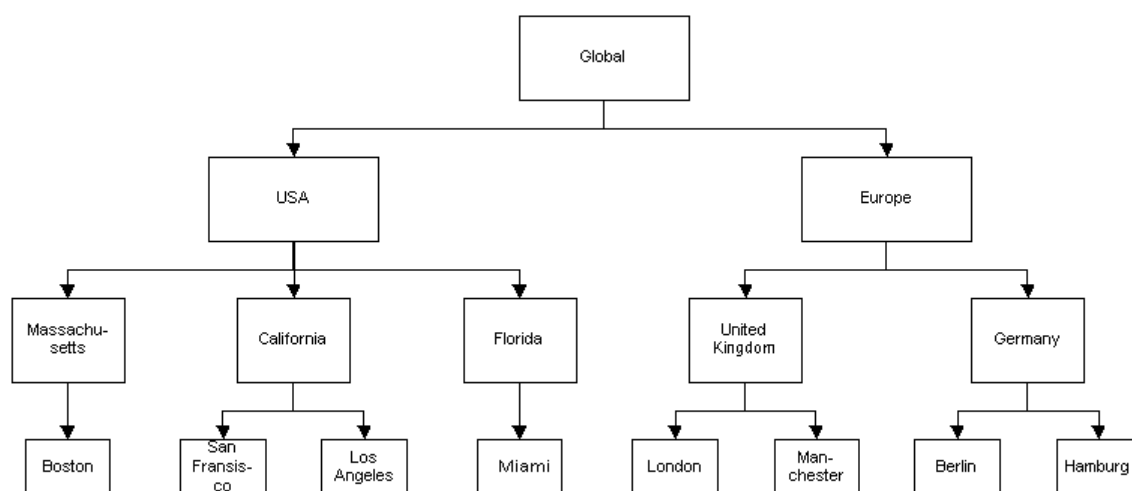
Universe reports are certain reports available in the Maconomy Portal system. The hierarchies determine how your figures should be presented and summed. While parts of the functionality of reporting hierarchies is similar to that of the dimension structures set up in the G/L module, it is important to note that reporting hierarchies are not used in any of the standard reports and printouts offered in the Maconomy client program. The reporting hierarchies are only used in connection with a number of specific Maconomy Universe reports that can be run from the Maconomy Portal framework.

## Central Concepts

This section describes a number of important terms and concepts used in connection with reporting hierarchies in Maconomy. As the terms and concepts are used in the descriptions of the workspaces used for setting up hierarchies as well as in the remainder of this introduction, it is recommended that you read this section before proceeding.

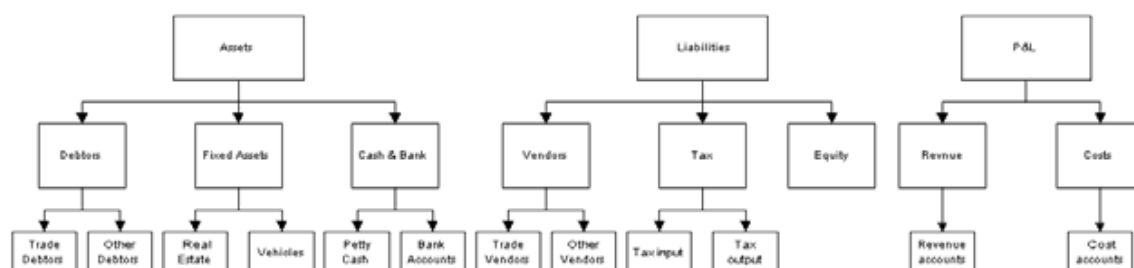
## Trees

A reporting hierarchy structure consists of a number of trees. A tree is the topmost level in a hierarchy. For instance, a reporting hierarchy reflecting a geographically organized enterprise with offices in Europe and the USA could contain a single tree which sums up the figures from each of the geographical divisions in the organization, thus showing the grand total.



A reporting hierarchy can also contain multiple trees. Multiple trees should be used when the topmost level of information should show totals that are not related. A chart of accounts is an example of such a structure. Here, all the profit and loss accounts should be summed at the top level, and so should the balance sheet. However, the P&L, assets, and liabilities should not be added. Therefore, a reporting hierarchy used for a chart of accounts should consist of three trees, as shown in the simplified illustration below.





Please note that the structure in the illustration above is a very simplified example which does not necessarily reflect local accounting standards in your country. For instance, Equity may be required to be placed in a tree of its own.

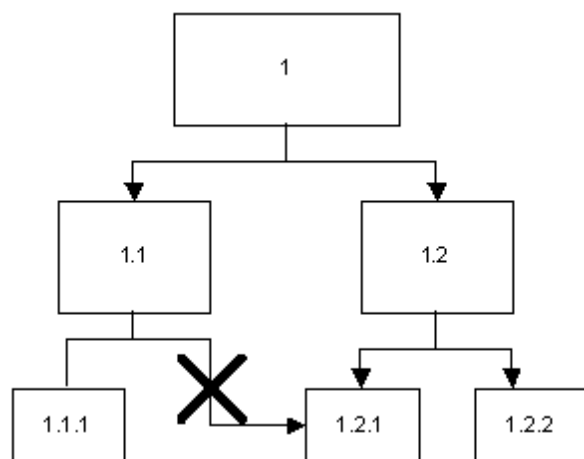
## Nodes

The components making up each tree are called nodes. In the geographical example above, each of the boxes represents a node including the “Global” box.

As it also appears from the illustration, each node can have any number of nodes beneath it in the structure.

## Parents and Children

A node located directly beneath another node is called a child while the node directly above another node is referred to as the parent. While a node can have any number of children, it cannot have more than one parent.



*Incorrect: A node can have no more than one parent*

## Leaves

A node which does not have any children is called a leaf. Leaves are the only nodes that can be assigned to Maconomy information and thereby provide the figures to be summed on the parent levels above.

The type of hierarchy (see the description of the field “Type”) determines which type of information can be assigned to the leaves. For instance, in a hierarchy of the type “Account,” you assign account numbers to the individual leaves, and the reports using the hierarchy in question will thus show information grouped by account numbers. In the case of our basic example, the type of information is locations, and therefore you can assign values from the Location dimension to the leaves. You can create hierarchies for a

number of information types, including each of the G/L dimensions, jobs, activities, customers, vendors and more.

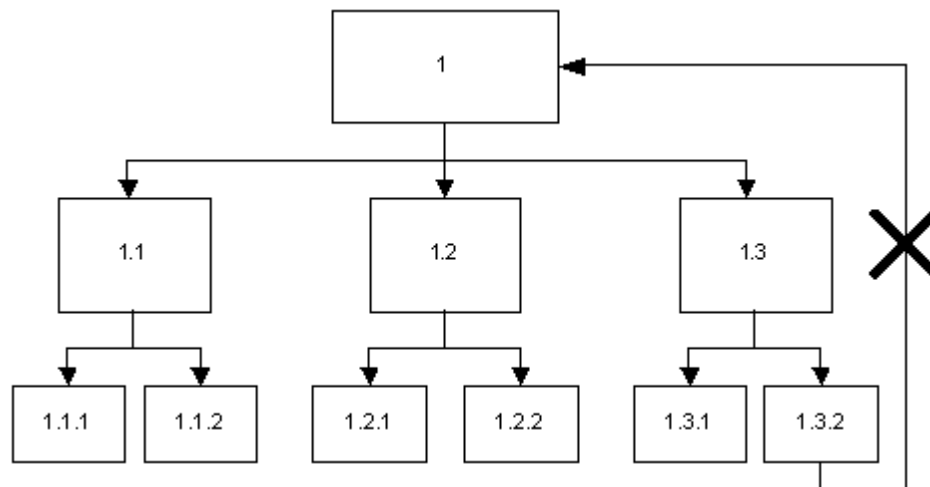
Returning to the example above, the boxes “Boston,” “Los Angeles,” “San Francisco,” “Miami,” “London,” “Manchester,” “Berlin,” and “Hamburg” are leaves, as they do not have any children. By assigning each of these leaves to a location created in the workspace Locations, we specify that each leaf should sum up figures from the location in question, that is, that the leaf “San Francisco” should sum up all figures posted to the location “SF,” the leaf “Los Angeles” should sum up all figures posted to the location “LA,” and so on. Due to the hierarchical structure, the node “California” will now sum up of the figures in the nodes “Los Angeles” and “San Francisco,” and the information is thereby aggregated all the way to the top level.

## Levels

The vertical position of each node in the hierarchy is indicated by means of a level number. Nodes on the topmost level are at level 1. Each of their children is at level 2, and so on. Note that leaves do not have to occur on the same level.

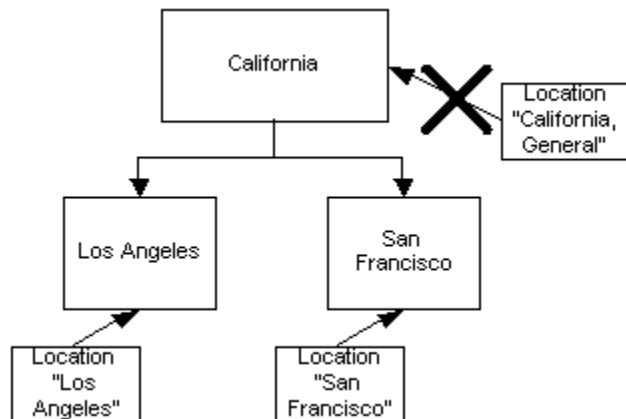
## Allowed and Disallowed Structures

It is only possible to create regular tree structures where each node has zero or one parents. Circular structures are not allowed. This means that a node cannot be assigned a parent which is an ancestor of the node itself. By ancestor is meant a node which is a parent of the specified node, a parent of the parent of the node, and so on.

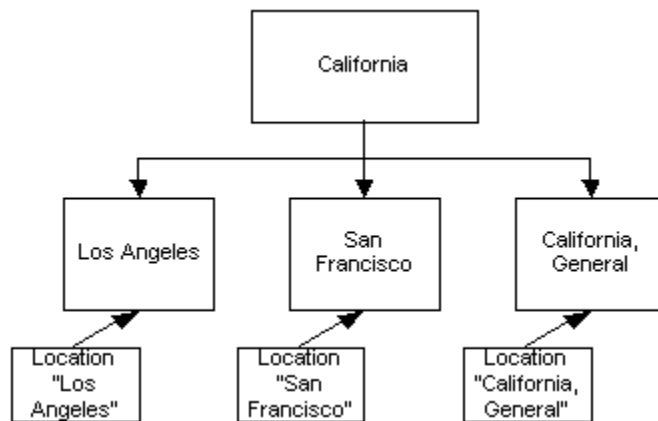


*Incorrect: Circular structures are not allowed*

Furthermore, it is not possible for a node to be both a leaf and a parent. Returning to our basic example, consider a situation where you register certain expenses that concern the whole California division (for instance rent of facilities) on a location called “California, General.” You do not wish to register parts of the expense on each California office, as it concerns the division as a whole. In a situation like this, you cannot assign the location “California, General” directly to the node “California” as if the node were a leaf, as it already has the children “Los Angeles” and “San Francisco.” Instead, you must create a node for the general location value, making it a child of the “California” node and assigning the “California, General” location. By means of this structure, the total of the California division will include figures from the individual offices as well as the general entries, and the location “California, General” will appear as a separate item beneath the California node, just like the individual offices.



*Incorrect*



*Correct*

## Creating and Using Reporting Hierarchies

You can create hierarchies for a number of information types, including each of the G/L dimensions, jobs, activities, customers, vendors, and more.

Reporting hierarchies are created in the workspaces Reporting Hierarchies, Reporting Hierarchy Nodes, and Node Attributes. In the workspace Reporting Hierarchies, you can create and name each hierarchy, specifying the type of information to which it pertains for instance whether the current hierarchy is for accounts, locations, jobs, and so on. The name, description, type, and so on are not necessarily for information only the reports may use the information to find out which hierarchy to apply to the current report. For instance, a chart of accounts can be structured differently from country to country. Therefore, a report for printing a chart of accounts could use the contents in the “Description” field to identify the hierarchy reflecting the structure in the country in which the current user is employed. The criteria used by each Maconomy Universe report to find the hierarchy to apply is indicated in the report specific manual of the report in question.

In the sub-tab of the workspace Reporting Hierarchies, you can create the individual nodes in the structure. For each node, you can specify a parent node and if the node is a leaf the specific dimension value, job number, and so on (depending on the type of reporting hierarchy) whose figures should be included in the leaf. This means that if you are creating an account hierarchy, each leaf can be assigned to a specific account, and the figures for this account are included in the leaf.

While creating a hierarchy, you can use the workspace Reporting Hierarchy Nodes. In this workspace, the tab shows one node at a time, and in the sub-tab, you can create nodes which will automatically become children of the node shown in the tab. While it is possible to build the whole hierarchical structure in the workspace Reporting Hierarchies, the workspace Reporting Hierarchy Nodes provides a better overview, as you work with one parent node at a time.

If you have both workspaces open at the same time, you can use the sub-tab of the workspace Reporting Hierarchies to mark the node to which you want to assign children, as the workspace Reporting Hierarchy Nodes will automatically change to the selected node. However, this only applies if “Automatic Find” has been selected in the Find menu.

# Self-Invoicing

Self-invoicing enhances Maconomy's subcontractor functionality. It is a process where the company prepares the vendor invoice, sends it to the vendor, and then pays the invoice. The invoice is based on the agreement reached between the company and the vendor, and reconciled with the relevant time and expense registrations.

With this enhancement, companies receive assurance from their vendors early on that all costs are registered, and are able to control the amounts for which they are billed. Vendors also benefit because self-invoicing generally speeds up the payment process.

This enhancement also supports a German statutory requirement.

## Workflow

The high-level workflow for self-invoicing is as follows:

1. Your company signs an agreement with the vendor.

The vendor is a subcontractor with employee credentials who registers time and expenses in your Maconomy system.

2. For the specific vendor, enable the creation of self-invoices from purchase orders.

You can also make it mandatory for the vendor to refer to a purchase order/purchase order line when registering time and expenses.

**Note:** You can also opt to enable the creation of a self-invoice for specific purchase orders only. You can do this directly in the purchase order.

3. Create a job.

This is the job you will specify in the purchase order line. You can also create and specify a job after purchase order creation.

4. Create a purchase order based on the terms of the agreement.

5. The vendor performs work according to the agreement.

6. The vendor registers and submits time and/or expense sheets.

7. If approval hierarchies are set up: designated approvers from your company and/or the vendor approve the time/expense sheets.

8. Create a self-invoice.

You can create self-invoices one at a time, or by batch.

9. Send the self-invoice.

Whether you create self-invoices individually or in batches, you can only send them for approval individually.

- If approval hierarchies are set up: The designated approver from your company (for example, someone from the accounting department or a project manager) approves the self-invoice.
- Otherwise, send the self-invoice to your vendor (for approval within Maconomy, or outside of Maconomy).

10. If there is a discrepancy between the purchase order details and the vendor's registered time and expenses, resolve the difference before sending the self-invoice out.

11. The vendor either approves or rejects the self-invoice:
  - If approved: Your company posts the invoice, and the vendor pays the amount due.
  - If rejected: You negotiate with the vendor, revise the invoice as needed, and resend the invoice.

## “How to” Section

### Enable Self-Invoice Creation for a Vendor

**To enable the creation of self-invoices from all purchase orders for a specific vendor:**

1. In the Vendors workspace (**Accounts Payable » Vendors**), select a vendor from the filter list.
2. Navigate to the Allowed Actions panel of the workspace (**Home section » Information tab » Allowed Actions panel**).
3. In the Purchase Orders island, select the **Default to Self Invoices** check box.
4. If needed, select one or both of the following check boxes as well:
  - Reference Mandatory on Time Sheet Lines
  - Reference Mandatory on Expense Sheet Lines
5. Click **Save Vendor**.

### Create a Purchase Order for a Subcontractor

**To create a purchase order for subcontractor services:**

1. In the Purchase Processes workspace (**Accounts Payable » Purchase Processes**), click the **New Purchase Process** action.  
The Create Purchase Process dialog box opens.
2. Fill out the following required fields:
  - **Purchase Process Type** – select **Purchase Order**.
  - **Purchase Transaction Type** – select **Subcontractor**.
  - **Vendor**
3. Click **Create**.
4. In the Payment island of the Purchase Order tab (**Purchase Processes » Purchase Process » Purchase Order tab**), select the **Self Invoice** check box if self-invoicing is not enabled for the specified vendor and you want to enable it for this purchase order.  
OR:  
If self-invoicing is enabled for the vendor and you do not want to use it for this purchase order, clear the **Self Invoice** check box.
5. In the Allocation sub-tab (**Purchase Processes » Purchase Process » Purchase Order tab » Allocation sub-tab**), create an allocation line.
6. Fill out the following fields in the allocation line:
  - **Purchase Line Type** – select **Subcontractor Reconciliation**.

- **Agreement Type** – select either **Time and Material** or **Fixed Price**, depending on the details of your agreement with your vendor.
  - **Activity Type** – select either **Time** or **Amount**.
  - **Job No.** – If possible, specify a job in the purchase order line. Otherwise, you can specify the job later on.
  - **Task**
  - **Empl. No.** – If the vendor employs multiple people, you can specify in this field if you want only one employee from the vendor to use this purchase order line as a reference for registered time and expenses.
  - **Quantity**
  - **Unit Price**
7. Click **Save Purchase Order Line**, or press ENTER.
  8. In the Purchase Order tab, click **Submit Purchase Order**.

## Create a Self-Invoice

### To create a single self-invoice:

1. In the Purchase Processes workspace, select the relevant purchase order from the filter list.
2. If you need to confirm that you created job entries which reference the purchase order lines, navigate to the Not invoiced job entries sliding panel (**Purchase Processes workspace » Purchase Process » Purchase Order tab » Allocation sub-tab » Not invoiced job entries sliding panel**).
3. In the Purchase Order tab, click **Actions » Create Self Invoice**.  
The Create Self Invoice dialog box opens.
4. Fill out the following fields:
  - Entry Date
  - Cut Off Date (optional)
5. Click **Create Self Invoice**.  
Maconomy displays the following message: Vendor invoice created.
6. Click **OK**.
7. To view the created vendor invoice, you can navigate to either of the following:
  - Related Vendor Invoices sliding panel (**Purchase Processes workspace » Purchase Process » Purchase Order tab » Related Vendor Invoices**)
  - Vendor Invoices workspace

## Create Self-Invoices by Batch

### To create self-invoices by batch:

1. Navigate to **Accounts Payable » Self Invoices** workspace.
2. In the Batch Self Invoice tab, specify selection criteria if needed.

3. Select the **Show Lines** check box.

Maconomy displays purchase orders in the Purchase Orders sub-tab (that is, all purchase orders or those that fit the selection criteria you specified).

If a purchase order has job entries that are not yet invoiced, Maconomy highlights the line for that purchase order in green.

4. To view details about job entries that are not yet invoiced:
  - a. In the Purchase Orders sub-tab, select a purchase order.
  - b. Navigate to **Purchase Orders sub-tab » Allocation sub-tab » Not invoiced job entries sliding panel**.
5. In the Batch Self Invoice tab, click the **Create Self Invoices** action.  
The Create Self Invoices dialog box opens.
6. Fill out the following fields:
  - Entry Date
  - Cut Off Date (optional)
7. Click **Create Self Invoices**.

You can now view the created self-invoices in the Vendor Invoices workspace filter list (**Accounts Payable » Vendor Invoices**).

## Allocate Subcontractor Differences before Reconciliation

If you try to submit an invoice with discrepancies, Maconomy informs you about the mismatch and does not allow you to submit the invoice until after you have resolved the differences.

If you click **Submit for Approval**, Maconomy displays an error message.

**To allocate differences between subcontractor reconciliation invoice allocation lines and selected job entries:**

1. Click **OK** to close the error message.
2. In the Allocation sub-tab (**Vendor Invoices workspace » Vendor Invoices » Vendor Invoice tab » Allocation sub-tab**), check the following fields to find out if the total for subcontractor reconciliation tallies with the total for the selected job entries:
  - Total for Subcontractor Reconciliation
  - Quantity
  - Unit Price
3. In the Vendor Invoice tab, click the **Allocate Subcontractor Differences** action.  
In the Allocation sub-tab, Maconomy adds one new invoice allocation line (with Job Cost line type) for each job to address the difference.
4. If you have not previously defined a subcontractor variance task for the job you specified in the purchase order, Maconomy displays an error message.
  - a. Click **OK**.
  - b. In the Jobs workspace (**Jobs » Jobs**), select the relevant job from the filter list.



- c. Navigate to **Jobs workspace » Home section » Tasks sub-tab » Standard Tasks island**.
  - d. In the **Subcontractor Variance** field, select an applicable value from the drop-down list.  
Maconomy displays a warning message.
  - e. Click **OK**.
  - f. Click **Save Job**.
  - g. Navigate to **Vendor Invoices workspace » Vendor Invoices » Vendor Invoice tab**.
  - h. Click the **Allocate Subcontractor Differences** action again.  
In the Allocation sub-tab, Maconomy adds one new invoice allocation line (with Job Cost line type) for each job to address the difference.
5. In the Vendor Invoice tab, click **Submit for Approval**.

## Notifications

Notifications are initially assigned to a window group in the Users workspace. After, notifications are triggered by specific criteria or factors. These notifications in turn trigger their respective To-Dos, which instruct the user to perform a task or simply provide information. You can change the name of a To-Do from within the Workspace Client. A To-Do can be sent to one or multiple recipients, depending on the setup.

### ActionFromRecruitment

This notification is used to inform users about pending actions in personnel requisitions. It is triggered when:

1. A personnel requisition is open and approved.
2. An action has a Planned Starting Date that has passed.
3. The action is not closed.

This notification in turn triggers the Waiting Recruitment Action To-Do.

#### Recipient

The Waiting Recruitment Action To-Do is received by the following users:

- The employee assigned as recruiter for the personnel requisition

#### Workspace

The Waiting Recruitment Action To-Do directs the recipient/s to the Recruitment workspace.

### ApprovalTask

This generic notification is used to inform users about pending approval tasks. It works for all types of approvals, and is triggered when:

1. An approval hierarchy is created.
2. A transaction (and/or master data) is created and submitted, or updated and submitted.

This notification in turn triggers the Approval Tasks To-Do.

#### Recipient

The Approval Tasks To-Do is received by the following users:

- The user defined in the approval hierarchy.

#### Workspace

The Approval Tasks To-Do directs the recipient/s to the Approvals workspace.

### ApproveAbsenceCalendarLines

This notification is used to inform users about pending absence approvals. It is triggered when:

1. An absence request is created for a given employee and submitted and awaits approval.

This notification in turn triggers the Approve Absence To-Do.

### Recipient

The Approve Absence To-Do is received by the following users:

- The employee designated as absence approver for the employee for which the request is created

### Workspace

The Approve Absence To-Do directs the recipient/s to the relevant request in the Absence Approval workspace.

## ApproveAllowanceRequestAbsenceEntries

This notification is used to inform users about pending allowance approvals. It is triggered when:

1. An allowance request is created for a given employee and submitted and awaits approval.

This notification in turn triggers the Approve Absence Allowance To-Do.

### Recipient

The Approve Absence Allowance To-Do is received by the following users:

- The employee designated as absence approver for the employee requesting the allowance.

### Workspace

The Approve Absence Allowance To-Do directs the recipient/s to the Absence Approval workspace.

## ApproveCompanyCustomer

This notification is used to control the creation of company customers. It is triggered when:

1. Approval hierarchies are used for company customers.
2. A company customer is created and submitted.

This notification in turn triggers the Approve Company Customer To-Do.

### Recipient

The Approve Company Customer To-Do is received by the following users:

- The user defined as approver in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the company customer first.

### Workspace

The Approve Company Customer To-Do directs the recipient/s to the Company Customer workspace.

## ApproveCompanyCustomerByType

This notification is used to control the creation of company customers. It is triggered when:

1. Approval hierarchies are used for company customers. An employee type is specified as approver.

2. A company customer is created and submitted.

This notification in turn triggers the Approve Company Customer by Type To-Do.

### Recipient

The Approve Company Customer by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the company customer first.

### Workspace

The Approve Company Customer by Type To-Do directs the recipient/s to the Company Customer workspace.

## ApproveCompanyCustomerSubstitute

This notification is used to control the creation of company customers. It is triggered when:

1. Approval hierarchies are used for company customers. A substitute approver is specified.
2. A company customer is created and submitted.

This notification in turn triggers the Approve Company Customer (Substitute) To-Do.

### Recipient

The Approve Company Customer (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the company customer first.

### Workspace

The Approve Company Customer (Substitute) To-Do directs the recipient/s to the Company Customer workspace.

## ApproveCompanyCustomerSubstituteByType

This notification is used to control the creation of company customers. It is triggered when:

1. Approval hierarchies are used for company customers. An employee type is specified as substitute approver.
2. A company customer is created and submitted.

This notification in turn triggers the Approve Company Customer by Type (Substitute) To-Do.

### Recipient

The Approve Company Customer by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the company customer first.

### Workspace

The Approve Company Customer by Type (Substitute) To-Do directs the recipient/s to the Company Customer workspace.

## ApproveCompanyVendor

This notification is used to control the creation of company vendors. It is triggered when:

1. Approval hierarchies are used for company vendors.
2. A company vendor is created and submitted.

This notification in turn triggers the Approve Company Vendor To-Do.

### Recipient

The Approve Company Vendor To-Do is received by the following users:

- The user defined as approver in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the company vendor first.

### Workspace

The Approve Company Vendor To-Do directs the recipient/s to the Company Vendor workspace.

## ApproveCompanyVendorByType

This notification is used to control the creation of company vendors. It is triggered when:

1. Approval hierarchies are used for company vendors. An employee type is specified as approver.
2. A company vendor is created and submitted.

This notification in turn triggers the Approve Company Vendor by Type To-Do.

### Recipient

The Approve Company Vendor by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the company vendor first.

### Workspace

The Approve Company Vendor by Type To-Do directs the recipient/s to the Company Vendor workspace.

## ApproveCompanyVendorSubstitute

This notification is used to control the creation of company vendors. It is triggered when:

1. Approval hierarchies are used for company vendors. A substitute approver is specified.
2. A company vendor is created and submitted.

This notification in turn triggers the Approve Company Vendor (Substitute) To-Do.

### Recipient

The Approve Company Vendor (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the company vendor first.

## Workspace

The Approve Company Vendor (Substitute) To-Do directs the recipient/s to the Company Vendor workspace.

## ApproveCompanyVendorSubstituteByType

This notification is used to control the creation of company vendors. It is triggered when:

1. Approval hierarchies are used for company vendors. An employee type is specified as substitute approver.
2. A company vendor is created and submitted.

This notification in turn triggers the Approve Company Vendor by Type (Substitute) To-Do.

## Recipient

The Approve Company Vendor by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the company vendor first.

## Workspace

The Approve Company Vendor by Type (Substitute) To-Do directs the recipient/s to the Company Vendor workspace.

## ApproveCustomer

This notification is used to control the creation of customers. It is triggered when:

1. Approval hierarchies are used for customers.
2. A customer is created and submitted.

This notification in turn triggers the Approve Customer To-Do.

## Recipient

The Approve Customer To-Do is received by the following users:

- The user defined as approver in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the customer first.

## Workspace

The Approve Customer To-Do directs the recipient/s to the Customer workspace.

## ApproveCustomerByType

This notification is used to control the creation of customers. It is triggered when:

1. Approval hierarchies are used for customers. An employee type is specified as approver.
2. A customer is created and submitted.

This notification in turn triggers the Approve Customer by Type To-Do.

## Recipient

The Approve Customer by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the customer first.

## Workspace

The Approve Customer by Type To-Do directs the recipient/s to the Customer workspace.

## ApproveCustomerSubstitute

This notification is used to control the creation of customers. It is triggered when:

1. Approval hierarchies are used for customers. A substitute approver is specified.
2. A customer is created and submitted.

This notification in turn triggers the Approve Customer (Substitute) To-Do.

## Recipient

The Approve Customer (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the customer first.

## Workspace

The Approve Customer (Substitute) To-Do directs the recipient/s to the Customer workspace.

## ApproveCustomerSubstituteByType

This notification is used to control the creation of customers. It is triggered when:

1. Approval hierarchies are used for customers. An employee type is specified as substitute approver.
2. A customer is created and submitted.

This notification in turn triggers the Approve Customer by Type (Substitute) To-Do.

## Recipient

The Approve Customer by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the customer first.

## Workspace

The Approve Customer by Type (Substitute) To-Do directs the recipient/s to the Customer workspace.

## ApproveDailyTimeSheet

This notification is used to inform users about daily time sheets waiting for approval. It is triggered when:

1. The job is set up for the supervisor's approval of time.

2. A daily time sheet is submitted but is not yet approved.

This notification in turn triggers the Approve Daily Time Sheet To-Do.

### Recipient

The Approve Daily Time Sheet To-Do is received by the following users:

- The supervisor of the employee registered on the daily time sheet

### Workspace

The Approve Daily Time Sheet To-Do directs the recipient/s to the Supervisor Approval (Time & Expense) workspace.

## ApproveEmployee

This notification is used to control the creation of employees. It is triggered when:

1. Approval hierarchies are used for employees.
2. An employee is created and submitted.

This notification in turn triggers the Approve Employee To-Do.

### Recipient

The Approve Employee To-Do is received by the following users:

- The user defined as approver in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the employee first.

### Workspace

The Approve Employee To-Do directs the recipient/s to the Employees workspace.

## ApproveEmployeeByType

This notification is used to control the creation of employees. It is triggered when:

1. Approval hierarchies are used for employees. An employee type is specified as approver.
2. An employee is created and submitted.

This notification in turn triggers the Approve Employee by Type To-Do.

### Recipient

The Approve Employee by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the employee first.

### Workspace

The Approve Employee by Type To-Do directs the recipient/s to the Employees workspace.

## ApproveEmployeeRequisition

This notification is used for the approval of employee requisitions. It is triggered when:



1. An Express Purchase Order is submitted for approval.

This notification in turn triggers the Approve Employee Requisition To-Do.

### Recipient

The Approve Employee Requisition To-Do is received by the following users:

- Any user in the group assigned to the notification

### Workspace

The Approve Employee Requisition To-Do directs the recipient/s to the Purchase Order Administration workspace.

## ApproveEmployeeSubstitute

This notification is used to control the creation of employees. It is triggered when:

1. Approval hierarchies are used for employees. A substitute approver is specified.
2. An employee is created and submitted.

This notification in turn triggers the Approve Employee (Substitute) To-Do.

### Recipient

The Approve Employee (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the employee first.

### Workspace

The Approve Employee (Substitute) To-Do directs the recipient/s to the Employees workspace.

## ApproveEmployeeSubstituteByType

This notification is used to control the creation of employees. It is triggered when:

1. Approval hierarchies are used for employees. An employee type is specified as substitute approver.
2. An employee is created and submitted.

This notification in turn triggers the Approve Employee by Type (Substitute) To-Do.

### Recipient

The Approve Employee by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the employee first.

### Workspace

The Approve Employee by Type (Substitute) To-Do directs the recipient/s to the Employees workspace.

## ApproveExpenseSheet

This notification is used to inform users about pending expense sheet approvals. It is triggered when:

1. The job is set up for the supervisor's approval of expenses.
2. An expense sheet is submitted but is not yet approved.

This notification in turn triggers the Approve Expense Sheet To-Do.

### Recipient

The Approve Expense Sheet To-Do is received by the following users:

- The supervisor of the employee registered on the expense sheet.

### Workspace

The Approve Expense Sheet To-Do directs the recipient/s to the Supervisor Approval (Time & Expense) workspace.

## ApproveExpenseSheetHeader

This notification is used to inform users about pending expense sheet approvals, and only applies when using approval hierarchies on expense sheet headers. It is triggered when:

1. Approval hierarchies are used for expense sheets.
2. An expense sheet is submitted but is not yet approved.

This notification in turn triggers the Approve Expense Sheet To-Do.

### Recipient

The Approve Expense Sheet To-Do is received by the following users:

- The user defined as approver in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the expense sheet first.

### Workspace

The Approve Expense Sheet To-Do directs the recipient/s to the Approve Expense Sheets workspace.

## ApproveExpenseSheetHeaderByType

This notification is used to inform users about pending expense sheet approvals, and only applies when using approval hierarchies on expense sheet headers. It is triggered when:

1. Approval hierarchies are used for expense sheets. An employee type is specified as approver.
2. An expense sheet is submitted but is not yet approved.

This notification in turn triggers the Approve Expense Sheet by Type To-Do.

### Recipient

The Approve Expense Sheet by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the expense sheet first.

## Workspace

The Approve Expense Sheet by Type To-Do directs the recipient/s to the Approve Expense Sheets workspace.

## ApproveExpenseSheetHeaderSubstitute

This notification is used to inform users about pending expense sheet approvals, and only applies when using approval hierarchies on expense sheet headers. It is triggered when:

1. Approval hierarchies are used for expense sheets. A substitute approver is specified.
2. An expense sheet is submitted but is not yet approved.

This notification in turn triggers the Approve Expense Sheet (Substitute) To-Do.

## Recipient

The Approve Expense Sheet (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the expense sheet first.

## Workspace

The Approve Expense Sheet (Substitute) To-Do directs the recipient/s to the Approve Expense Sheets workspace.

## ApproveExpenseSheetHeaderSubstituteByType

This notification is used to inform users about pending expense sheet approvals, and only applies when using approval hierarchies on expense sheet headers. It is triggered when:

1. Approval hierarchies are used for expense sheets. An employee type is specified as substitute approver.
2. An expense sheet is submitted but is not yet approved.

This notification in turn triggers the Approve Expense Sheet by Type (Substitute) To-Do.

## Recipient

The Approve Expense Sheet by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the expense sheet first.

## Workspace

The Approve Expense Sheet by Type (Substitute) To-Do directs the recipient/s to the Approve Expense Sheets workspace.

## ApproveExpenseSheetLine

This notification is used to inform users about pending expense approvals, and only applies when using approval hierarchies on expense sheet lines. It is triggered when:

1. Approval hierarchies are used for expense sheet lines.

2. An expense sheet line is submitted but is not yet approved.

This notification in turn triggers the Approve Expense Sheet Line To-Do.

### Recipient

The Approve Expense Sheet Line To-Do is received by the following users:

- The user defined as approver in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the expense sheet line first.

### Workspace

The Approve Expense Sheet Line To-Do directs the recipient/s to the Approve Expense Sheet Lines workspace.

## ApproveExpenseSheetLineByType

This notification is used to inform users about pending expense approvals, and only applies when using approval hierarchies on expense sheet lines. It is triggered when:

1. Approval hierarchies are used for expense sheet lines. An employee type is specified as approver.
2. An expense sheet line is submitted but is not yet approved.

This notification in turn triggers the Approve Expense Sheet Line by Type To-Do.

### Recipient

The Approve Expense Sheet Line by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the expense sheet line first.

### Workspace

The Approve Expense Sheet Line by Type To-Do directs the recipient/s to the Approve Expense Sheet Lines workspace.

## ApproveExpenseSheetLineSubstitute

This notification is used to inform users about pending expense approvals, and only applies when using approval hierarchies on expense sheet lines. It is triggered when:

1. Approval hierarchies are used for expense sheet lines. A substitute approver is specified.
2. An expense sheet line is submitted but is not yet approved.

This notification in turn triggers the Approve Expense Sheet Line (Substitute) To-Do.

### Recipient

The Approve Expense Sheet Line (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the expense sheet line first.

## Workspace

The Approve Expense Sheet Line (Substitute) To-Do directs the recipient/s to the Approve Expense Sheet Lines workspace.

## ApproveExpenseSheetLineSubstituteByType

This notification is used to inform users about pending expense approvals, and only applies when using approval hierarchies on expense sheet lines. It is triggered when:

1. Approval hierarchies are used for expense sheet lines. An employee type is specified as substitute approver.
2. An expense sheet line is submitted but is not yet approved.

This notification in turn triggers the Approve Expense Sheet Line by Type (Substitute) To-Do.

## Recipient

The Approve Expense Sheet Line by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the expense sheet line first.

## Workspace

The Approve Expense Sheet Line by Type (Substitute) To-Do directs the recipient/s to the Approve Expense Sheet Lines workspace.

## ApproveExpenseSheetLines

This notification is used to inform users about pending expense approvals. It is triggered when:

1. A job is set up for the project manager's approval of expenses.
2. A user submits an expense sheet that includes a line for the job which requires the project manager's approval of expenses. This expense sheet may or may not already be approved.

This notification in turn triggers the Approve Expenses as Project Manager To-Do.

## Recipient

The Approve Expenses as Project Manager To-Do is received by the following users:

- The project manager of the job with the submitted lines.

## Workspace

The Approve Expenses as Project Manager To-Do directs the recipient/s to the Jobs workspace.

## ApproveFinanceBudget

This notification is used to inform users about pending finance budget approvals. It is triggered when:

1. A finance budget is submitted.

This notification in turn triggers the Approve Finance Budget To-Do.

### Recipient

The Approve Finance Budget To-Do is received by the following users:

- The employee responsible for the sum budget according to the budget hierarchy

### Workspace

The Approve Finance Budget To-Do directs the recipient/s to the Finance Budgets workspace.

## ApproveInvoiceAllocationLine

This notification is used to inform users about pending approval of invoice allocation lines, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for invoice allocation lines.
2. Vendor invoice lines are submitted but not yet approved.

This notification in turn triggers the Approve Invoice Allocation Line To-Do.

### Recipient

The Approve Invoice Allocation Line To-Do is received by the following users:

- The user defined as approver in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the invoice allocation line first.

### Workspace

The Approve Invoice Allocation Line To-Do directs the recipient/s to the Approve Invoice Allocation Line workspace.

## ApproveInvoiceAllocationLineByType

This notification is used to inform users about pending approval of invoice allocation lines, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for invoice allocation lines. An employee type is specified as approver.
2. Vendor invoice lines are submitted but not yet approved.

This notification in turn triggers the Approve Invoice Allocation Line by Type To-Do.

### Recipient

The Approve Invoice Allocation Line by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the vendor invoice line first.

### Workspace

The Approve Invoice Allocation Line by Type To-Do directs the recipient/s to the Approve Invoice Allocation Line workspace.

## ApproveInvoiceAllocationLineSubstitute

This notification is used to inform users about pending approval of invoice allocation lines, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for invoice allocation lines. A substitute approver is specified.
2. Vendor invoice lines are submitted but not yet approved.

This notification in turn triggers the Approve Invoice Allocation Line (Substitute) To-Do.

### Recipient

The Approve Invoice Allocation Line (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the invoice allocation line first.

### Workspace

The Approve Invoice Allocation Line (Substitute) To-Do directs the recipient/s to the Approve Invoice Allocation Line workspace.

## ApproveInvoiceAllocationLineSubstituteByType

This notification is used to inform users about pending approval of invoice allocation lines, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for invoice allocation lines. An employee type is specified as substitute approver.
2. Vendor invoice lines are submitted but not yet approved.

This notification in turn triggers the Approve Invoice Allocation Line by Type (Substitute) To-Do.

### Recipient

The Approve Invoice Allocation Line by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the vendor invoice line first.

### Workspace

The Approve Invoice Allocation Line by Type (Substitute) To-Do directs the recipient/s to the Approve Invoice Allocation Line workspace.

## ApproveInvoiceDrafts

This notification is used to inform users about pending approval of invoice drafts, and only applies to draft invoices not covered by an approval hierarchy. It is triggered when:

1. A job invoice draft is submitted but is not yet approved.

This notification in turn triggers the Approve Invoice Drafts To-Do.

### Recipient

The Approve Invoice Drafts To-Do is received by the following users:

- The project manager of the job

## Workspace

The Approve Invoice Drafts To-Do directs the recipient/s to the Draft Invoices workspace, which is accessible only through notifications.

## ApproveInvoiceDraftsApprover

This notification is used to inform users about pending approval of invoice drafts, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for draft invoices.
2. A job invoice draft is submitted but is not yet approved.

This notification in turn triggers the Approve Invoice Drafts To-Do.

## Recipient

The Approve Invoice Drafts To-Do is received by the following users:

- The main approver specified in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the invoice draft first.

## Workspace

The Approve Invoice Drafts To-Do directs the recipient/s to the Draft Invoices workspace, which is accessible only through notifications.

## ApproveInvoiceDraftsApproverByType

This notification is used to inform users about pending approval of invoice drafts, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for draft invoices. An employee type is specified as approver.
2. A job invoice draft is submitted but is not yet approved.

This notification in turn triggers the Approve Invoice Drafts by Type To-Do.

## Recipient

The Approve Invoice Drafts by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the job invoice draft first.

## Workspace

The Approve Invoice Drafts by Type To-Do directs the recipient/s to the Draft Invoices workspace, which is accessible only through notifications.

## ApproveInvoiceDraftsSubstitute

This notification is used to inform users about pending approval of invoice drafts, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for draft invoices. A substitute approver is specified.



2. A job invoice draft is submitted but is not yet approved.

This notification in turn triggers the Approve Invoice Drafts (Substitute) To-Do.

### Recipient

The Approve Invoice Drafts (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the invoice draft first.

### Workspace

The Approve Invoice Drafts (Substitute) To-Do directs the recipient/s to the Draft Invoices workspace, which is accessible only through notifications.

## ApproveInvoiceDraftsSubstituteByType

This notification is used to inform users about pending approval of invoice drafts, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for draft invoices. An employee type is specified as substitute approver.
2. A job invoice draft is submitted but is not yet approved.

This notification in turn triggers the Approve Invoice Drafts by Type (Substitute) To-Do.

### Recipient

The Approve Invoice Drafts by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the job invoice draft first.

### Workspace

The Approve Invoice Drafts by Type (Substitute) To-Do directs the recipient/s to the Draft Invoices workspace, which is accessible only through notifications.

## ApproveJob

This notification is used to control the creation of jobs. It is triggered when:

1. Approval hierarchies are used for jobs.
2. A job is created and submitted.

This notification in turn triggers the Approve Job To-Do.

### Recipient

The Approve Job To-Do is received by the following users:

- The user defined as approver in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the job first.

### Workspace

The Approve Job To-Do directs the recipient/s to the Jobs workspace.

## ApproveJobByType

This notification is used to control the creation of jobs. It is triggered when:

1. Approval hierarchies are used for jobs. An employee type is specified as approver.
2. A job is created and submitted.

This notification in turn triggers the Approve Job by Type To-Do.

### Recipient

The Approve Job by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the job first.

### Workspace

The Approve Job by Type To-Do directs the recipient/s to the Jobs workspace.

## ApproveJobSubstitute

This notification is used to control the creation of jobs. It is triggered when:

1. Approval hierarchies are used for jobs. A substitute approver is specified.
2. A job is created and submitted.

This notification in turn triggers the Approve Job (Substitute) To-Do.

### Recipient

The Approve Job (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the job first.

### Workspace

The Approve Job (Substitute) To-Do directs the recipient/s to the Jobs workspace.

## ApproveJobSubstituteByType

This notification is used to control the creation of jobs. It is triggered when:

1. Approval hierarchies are used for jobs. An employee type is specified as substitute approver.
2. A job is created and submitted.

This notification in turn triggers the Approve Job by Type (Substitute) To-Do.

### Recipient

The Approve Job by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the job first.

## Workspace

The Approve Job by Type (Substitute) To-Do directs the recipient/s to the Jobs workspace.

## ApproveJobBudget

This notification is used to inform users about pending job budget approvals. It is triggered when:

1. A job budget is submitted but is not yet approved.

This notification in turn triggers the Approve Project Budget To-Do.

## Recipient

The Approve Project Budget To-Do is received by the following users:

- The project manager of the job

## Workspace

The Approve Project Budget To-Do directs the recipient/s to the Jobs workspace.

## ApproveJobBudgetByType

This notification is used to inform users about pending job budget approvals, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for job budgets. An employee type is specified as approver.
2. A job budget is submitted but is not yet approved.

This notification in turn triggers the Approve Job Budget by Type To-Do.

## Recipient

The Approve Job Budget by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver approves the job budget first.

## Workspace

The Approve Job Budget by Type To-Do directs the recipient/s to the Jobs workspace.

## ApproveJobBudgetSubstitute

This notification is used to control the creation of job budgets. It is triggered when:

1. Approval hierarchies are used for jobs. A substitute approver is specified.
2. A job budget is created and submitted.

This notification in turn triggers the Approve Job Budget (Substitute) To-Do.

## Recipient

The Approve Job Budget (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the job first.

## Workspace

The Approve Job Budget (Substitute) To-Do directs the recipient/s to the Jobs workspace.

## ApproveJobBudgetSubstituteByType

This notification is used to control the creation of job budgets. It is triggered when:

1. Approval hierarchies are used for jobs. An employee type is specified as substitute approver.
2. A job budget is created and submitted.

This notification in turn triggers the Approve Job Budget by Type (Substitute) To-Do.

## Recipient

The Approve Job Budget by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the job first.

## Workspace

The Approve Job Budget by Type (Substitute) To-Do directs the recipient/s to the Jobs workspace.

## ApproveMileageSheet

This notification is used to inform users about pending mileage sheet approvals. It is triggered when:

1. The job is set up for the supervisor's approval of expenses.
2. A mileage sheet is submitted but is not yet approved.

This notification in turn triggers the Approve Mileage Sheet To-Do.

## Recipient

The Approve Mileage Sheet To-Do is received by the following users:

- The supervisor of the user registered on the mileage sheet

## Workspace

The Approve Mileage Sheet To-Do directs the recipient/s to the Supervisor Approval (Time & Expense) workspace.

## ApproveMileageSheetHeader

This notification is used to inform users about pending mileage sheet approvals, and only applies when using approval hierarchies on mileage sheet headers. It is triggered when:

1. Approval hierarchies are used for mileage sheets.
2. A mileage sheet is submitted but is not yet approved.

This notification in turn triggers the Approve Mileage Sheet To-Do.

## Recipient

The Approve Mileage Sheet To-Do is received by the following users:

- The user defined as approver in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the mileage sheet first.

### Workspace

The Approve Mileage Sheet To-Do directs the recipient/s to the Approve Mileage Sheets workspace, which is accessible only through notifications.

## ApproveMileageSheetHeaderByType

This notification is used to inform users about pending mileage sheet approvals, and only applies when using approval hierarchies on mileage sheet headers. It is triggered when:

1. Approval hierarchies are used for mileage sheets. An employee type is specified as approver.
2. A mileage sheet is submitted but is not yet approved.

This notification in turn triggers the Approve Mileage Sheet by Type To-Do.

### Recipient

The Approve Mileage Sheet by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the mileage sheet first.

### Workspace

The Approve Mileage Sheet by Type To-Do directs the recipient/s to the Approve Mileage Sheets workspace, which is accessible only through notifications.

## ApproveMileageSheetHeaderSubstitute

This notification is used to inform users about pending mileage sheet approvals, and only applies when using approval hierarchies on mileage sheet headers. It is triggered when:

1. Approval hierarchies are used for mileage sheets. A substitute approver is specified.
2. A mileage sheet is submitted but is not yet approved.

This notification in turn triggers the Approve Mileage Sheet (Substitute) To-Do.

### Recipient

The Approve Mileage Sheet (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the mileage sheet first.

### Workspace

The Approve Mileage Sheet (Substitute) To-Do directs the recipient/s to the Approve Mileage Sheets workspace, which is accessible only through notifications.

## ApproveMileageSheetHeaderSubstituteByType

This notification is used to inform users about pending mileage sheet approvals, and only applies when using approval hierarchies on mileage sheet headers. It is triggered when:

## Notifications

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1. Approval hierarchies are used for mileage sheets. An employee type is specified as substitute approver.
2. A mileage sheet is submitted but is not yet approved.

This notification in turn triggers the Approve Mileage Sheet by Type (Substitute) To-Do.

### Recipient

The Approve Mileage Sheet by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the mileage sheet first.

### Workspace

The Approve Mileage Sheet by Type (Substitute) To-Do directs the recipient/s to the Approve Mileage Sheets workspace, which is accessible only through notifications.

## ApproveMileageSheetLine

This notification is used to inform users about pending approval of mileage sheet lines, and only applies when using approval hierarchies on mileage sheet lines. It is triggered when:

1. Approval hierarchies are used for mileage sheet lines.
2. A mileage sheet line is submitted but is not yet approved.

This notification in turn triggers the Approve Mileage Sheet Line To-Do.

### Recipient

The Approve Mileage Sheet Line To-Do is received by the following users:

- The user defined as approver in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the mileage sheet line first.

### Workspace

The Approve Mileage Sheet Line To-Do directs the recipient/s to the Approve Mileage Sheet Lines workspace, which is accessible only through notifications.

## ApproveMileageSheetLineByType

This notification is used to inform users about pending approval of mileage sheet lines, and only applies when using approval hierarchies on mileage sheet lines. It is triggered when:

1. Approval hierarchies are used for mileage sheet lines. An employee type is specified as approver.
2. A mileage sheet line is submitted but is not yet approved.

This notification in turn triggers the Approve Mileage Sheet Line by Type To-Do.

### Recipient

The Approve Mileage Sheet Line by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the mileage sheet line first.

## Workspace

The Approve Mileage Sheet Line by Type To-Do directs the recipient/s to the Approve Mileage Sheet Lines workspace, which is accessible only through notifications.

## ApproveMileageSheetLineSubstitute

This notification is used to inform users about pending approval of mileage sheet lines, and only applies when using approval hierarchies on mileage sheet lines. It is triggered when:

1. Approval hierarchies are used for mileage sheet lines. A substitute approver is specified.
2. A mileage sheet line is submitted but is not yet approved.

This notification in turn triggers the Approve Mileage Sheet Line (Substitute) To-Do.

## Recipient

The Approve Mileage Sheet Line (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the mileage sheet line first.

## Workspace

The Approve Mileage Sheet Line (Substitute) To-Do directs the recipient/s to the Approve Mileage Sheet Lines workspace, which is accessible only through notifications.

## ApproveMileageSheetLineSubstituteByType

This notification is used to inform users about pending approval of mileage sheet lines, and only applies when using approval hierarchies on mileage sheet lines. It is triggered when:

1. Approval hierarchies are used for mileage sheet lines. An employee type is specified as substitute approver.
2. A mileage sheet line is submitted but is not yet approved.

This notification in turn triggers the Approve Mileage Sheet Line by Type (Substitute) To-Do.

## Recipient

The Approve Mileage Sheet Line by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the mileage sheet line first.

## Workspace

The Approve Mileage Sheet Line by Type (Substitute) To-Do directs the recipient/s to the Approve Mileage Sheet Lines workspace, which is accessible only through notifications.

## ApprovePurchaseOrderHeader

This notification is used to inform users about pending purchase order approvals, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for purchase orders.

2. A purchase order is submitted but is not yet approved.

This notification in turn triggers the Approve Purchase Order To-Do.

### Recipient

The Approve Purchase Order To-Do is received by the following users:

- The user defined as approver in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the purchase order first.

### Workspace

The Approve Purchase Order To-Do directs the recipient/s to the Purchase Orders workspace.

## ApprovePurchaseOrderHeaderByType

This notification is used to inform users about pending purchase order approvals, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for purchase orders. An employee type is specified as approver.
2. A purchase order is submitted but is not yet approved.

This notification in turn triggers the Approve Purchase Order by Type To-Do.

### Recipient

The Approve Purchase Order by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the purchase order first.

### Workspace

The Approve Purchase Order by Type To-Do directs the recipient/s to the Purchase Orders workspace.

## ApprovePurchaseOrderHeaderSubstitute

This notification is used to inform users about pending purchase order approvals, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for purchase orders. A substitute approver is specified.
2. A purchase order is submitted but is not yet approved.

This notification in turn triggers the Approve Purchase Order (Substitute) To-Do.

### Recipient

The Approve Purchase Order (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the purchase order first.

### Workspace

The Approve Purchase Order (Substitute) To-Do directs the recipient/s to the Purchase Orders workspace.



## ApprovePurchaseOrderHeaderSubstituteByType

This notification is used to inform users about pending purchase order approvals, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for purchase orders. An employee type is specified as substitute approver.
2. A purchase order is submitted but is not yet approved.

This notification in turn triggers the Approve Purchase Order by Type (Substitute) To-Do.

### Recipient

The Approve Purchase Order by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the purchase order first.

### Workspace

The Approve Purchase Order by Type (Substitute) To-Do directs the recipient/s to the Purchase Orders workspace.

## ApprovePurchaseOrderLine

This notification is used to inform users about pending purchase order line approvals, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for purchase order lines.
2. A purchase order line is submitted but is not yet approved.

This notification in turn triggers the Approve Purchase Order Line To-Do.

### Recipient

The Approve Purchase Order Line To-Do is received by the following users:

- The user defined as approver in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the purchase order line first.

### Workspace

The Approve Purchase Order Line To-Do directs the recipient/s to the Purchase Orders workspace.

## ApprovePurchaseOrderLineByType

This notification is used to inform users about pending purchase order line approvals, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for purchase order lines. An employee type is specified as approver.
2. A purchase order line is submitted but is not yet approved.

This notification in turn triggers the Approve Purchase Order Line by Type To-Do.

## Recipient

The Approve Purchase Order Line by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the purchase order line first.

## Workspace

The Approve Purchase Order Line by Type To-Do directs the recipient/s to the Purchase Orders workspace.

## ApprovePurchaseOrderLineSubstitute

This notification is used to inform users about pending purchase order line approvals, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for purchase order lines. A substitute approver is specified.
2. A purchase order line is submitted but is not yet approved.

This notification in turn triggers the Approve Purchase Order Line (Substitute) To-Do.

## Recipient

The Approve Purchase Order Line (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the purchase order line first.

## Workspace

The Approve Purchase Order Line (Substitute) To-Do directs the recipient/s to the Purchase Orders workspace.

## ApprovePurchaseOrderLineSubstituteByType

This notification is used to inform users about pending purchase order line approvals, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for purchase order lines. An employee type is specified as substitute approver.
2. A purchase order line is submitted but is not yet approved.

This notification in turn triggers the Approve Purchase Order Line by Type (Substitute) To-Do.

## Recipient

The Approve Purchase Order Line by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the purchase order line first.

## Workspace

The Approve Purchase Order Line by Type (Substitute) To-Do directs the recipient/s to the Purchase Orders workspace.

## ApproveTimeSheet

This notification is used to inform users about pending time sheet approvals, and only applies when no approval hierarchy is set up. It is triggered when:

1. The job is set up for the supervisor's approval of time.
2. A time sheet is submitted but is not yet approved.

This notification in turn triggers the Approve Time Sheet To-Do.

### Recipient

The Approve Time Sheet To-Do is received by the following users:

- The supervisor of the user registered on the time sheet

### Workspace

The Approve Time Sheet To-Do directs the recipient/s to the Supervisor Approval (Time & Expense) workspace.

## ApproveTimeSheetHeaderApprovalHierarchy

This notification is used to inform users about pending time sheet approvals, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for time sheets.
2. A time sheet is submitted but is not yet approved.

This notification in turn triggers the Approve Time Sheet To-Do.

### Recipient

The Approve Time Sheet To-Do is received by the following users:

- The user defined as approver in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the time sheet first.

### Workspace

The Approve Time Sheet To-Do directs the recipient/s to the Approvals workspace.

## ApproveTimeSheetHeaderApprovalHierarchyByType

This notification is used to inform users about pending time sheet approvals, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for time sheets. An employee type is specified as approver.
2. A time sheet is submitted but is not yet approved.

This notification in turn triggers the Approve Time Sheet by Type To-Do.

### Recipient

The Approve Time Sheet by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the time sheet first.

## Workspace

The Approve Time Sheet by Type To-Do directs the recipient/s to the Approvals workspace.

## ApproveTimeSheetHeaderSubstituteApprovalHierarchy

This notification is used to inform users about pending time sheet approvals, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for time sheets. A substitute approver is specified.
2. A time sheet is submitted but is not yet approved.

This notification in turn triggers the Approve Time Sheet (Substitute) To-Do.

## Recipient

The Approve Time Sheet (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the time sheet first.

## Workspace

The Approve Time Sheet (Substitute) To-Do directs the recipient/s to the Approvals workspace.

## ApproveTimeSheetHeaderSubstituteApprovalHierarchyByType

This notification is used to inform users about pending time sheet approvals, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for time sheets. An employee type is specified as substitute approver.
2. A time sheet is submitted but is not yet approved.

This notification in turn triggers the Approve Time Sheet by Type (Substitute) To-Do.

## Recipient

The Approve Time Sheet by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the time sheet first.

## Workspace

The Approve Time Sheet by Type (Substitute) To-Do directs the recipient/s to the Approvals workspace.

## ApproveTimeSheetLineApprovalHierarchy

This notification is used to inform users about pending time sheet line approvals, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for time sheet lines.

2. A job has time sheet lines which are submitted but are not yet approved.

This notification in turn triggers the Approve Time Sheet Line To-Do.

### Recipient

The Approve Time Sheet Line To-Do is received by the following users:

- The user defined as approver in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the time sheet line first.

### Workspace

The Approve Time Sheet Line To-Do directs the recipient/s to the Approvals workspace.

## ApproveTimeSheetLineApprovalHierarchyByType

This notification is used to inform users about pending time sheet line approvals, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for time sheet lines. An employee type is specified as approver.
2. A job has time sheet lines which are submitted but not yet approved.

This notification in turn triggers the Approve Time Sheet Line by Type To-Do.

### Recipient

The Approve Time Sheet Line by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the time sheet lines first.

### Workspace

The Approve Time Sheet Line by Type To-Do directs the recipient/s to the Approvals workspace.

## ApproveTimeSheetLineSubstituteApprovalHierarchy

This notification is used to inform users about pending time sheet line approvals, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for time sheet lines. A substitute approver is specified.
2. A job has time sheet lines which are submitted but are not yet approved.

This notification in turn triggers the Approve Time Sheet Line (Substitute) To-Do.

### Recipient

The Approve Time Sheet Line (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the time sheet line first.

### Workspace

The Approve Time Sheet Line (Substitute) To-Do directs the recipient/s to the Approvals workspace.

## ApproveTimeSheetLineSubstituteApprovalHierarchyByType

This notification is used to inform users about pending time sheet line approvals, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for time sheet lines. An employee type is specified as substitute approver.
2. A job has time sheet lines which are submitted but not yet approved.

This notification in turn triggers the Approve Time Sheet Line by Type (Substitute) To-Do.

### Recipient

The Approve Time Sheet Line by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the time sheet lines first.

### Workspace

The Approve Time Sheet Line by Type (Substitute) To-Do directs the recipient/s to the Approvals workspace.

## ApproveTimeSheetLines

This notification is used to inform users about pending time sheet line approvals, and only applies when no approval hierarchy is set up. It is triggered when:

1. The job is set up for the project manager's approval of time.
2. A job has time sheet lines which are submitted but are not yet approved.

This notification in turn triggers the Approve Time as Project Manager To-Do.

### Recipient

The Approve Time as Project Manager To-Do is received by the following users:

- The project manager of the job with the submitted lines

### Workspace

The Approve Time as Project Manager To-Do directs the recipient/s to the Jobs workspace.

## ApproveUserInformation

This notification is used to control the user creation process. It is triggered when:

1. Approval hierarchies are used for users.
2. A user is created and submitted.

This notification in turn triggers the Approve User Information To-Do.

### Recipient

The Approve User Information To-Do is received by the following users:

- The user defined as approver in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the user first.

## Workspace

The Approve User Information To-Do directs the recipient/s to the Users workspace.

## ApproveUserInformationByType

This notification is used to control the user creation process. It is triggered when:

1. Approval hierarchies are used for users. An employee type is specified as approver.
2. A user is created and submitted.

This notification in turn triggers the Approve User Information by Type To-Do.

## Recipient

The Approve User Information by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the created user first.

## Workspace

The Approve User Information by Type To-Do directs the recipient/s to the Users workspace.

## ApproveUserInformationSubstitute

This notification is used to control the user creation process. It is triggered when:

1. Approval hierarchies are used for users. A substitute approver is specified.
2. A user is created and submitted.

This notification in turn triggers the Approve User Information (Substitute) To-Do.

## Recipient

The Approve User Information (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the user first.

## Workspace

The Approve User Information (Substitute) To-Do directs the recipient/s to the Users workspace.

## ApproveUserInformationSubstituteByType

This notification is used to control the user creation process. It is triggered when:

1. Approval hierarchies are used for users. An employee type is specified as substitute approver.
2. A user is created and submitted.

This notification in turn triggers the Approve User Information by Type (Substitute) To-Do.

## Recipient

The Approve User Information by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the created user first.

## Workspace

The Approve User Information by Type (Substitute) To-Do directs the recipient/s to the Users workspace.

## ApproveVendor

This notification is used to inform users about the pending approval of new vendors. It is triggered when:

1. Approval hierarchies are used for vendors.
2. A vendor is created and submitted.

This notification in turn triggers the Approve Vendor To-Do.

## Recipient

The Approve Vendor To-Do is received by the following users:

- The user defined as approver in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the vendor first.

## Workspace

The Approve Vendor To-Do directs the recipient/s to the Vendor workspace.

## ApproveVendorByType

This notification is used to inform users about the pending approval of new vendors, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for vendors. An employee type is specified as approver.
2. A vendor is created and submitted.

This notification in turn triggers the Approve Vendor by Type To-Do.

## Recipient

The Approve Vendor by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the vendor first.

## Workspace

The Approve Vendor by Type To-Do directs the recipient/s to the Vendor workspace.

## ApproveVendorInvoiceJournal

This notification is used to inform users about pending approval of vendor invoices, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for vendor invoices.



2. A vendor invoice is submitted but is not yet approved.

This notification in turn triggers the Approve Vendor Invoice To-Do.

### Recipient

The Approve Vendor Invoice To-Do is received by the following users:

- The user defined as approver in the approval hierarchy. However, the To-Do disappears if the substitute approver approves the vendor invoice first.

### Workspace

The Approve Vendor Invoice To-Do directs the recipient/s to the Vendor Invoice workspace.

## ApproveVendorInvoiceJournalByType

This notification is used to inform users about pending approval of vendor invoices, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for vendor invoices. An employee type is specified as approver.
2. A vendor invoice is submitted but is not yet approved.

This notification in turn triggers the Approve Vendor Invoice by Type To-Do.

### Recipient

The Approve Vendor Invoice by Type To-Do is received by the following users:

- All users who are assigned the employee type specified as approver. However, the To-Do disappears if another approver/substitute approver approves the vendor invoice first.

### Workspace

The Approve Vendor Invoice by Type To-Do directs the recipient/s to the Vendor Invoice workspace.

## ApproveVendorInvoiceJournalSubstitute

This notification is used to inform users about pending approval of vendor invoices, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for vendor invoices. A substitute approver is specified.
2. A vendor invoice is submitted but is not yet approved.

This notification in turn triggers the Approve Vendor Invoice (Substitute) To-Do.

### Recipient

The Approve Vendor Invoice (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the vendor invoice first.

### Workspace

The Approve Vendor Invoice (Substitute) To-Do directs the recipient/s to the Vendor Invoice workspace.

## ApproveVendorInvoiceJournalSubstituteByType

This notification is used to inform users about pending approval of vendor invoices, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for vendor invoices. An employee type is specified as substitute approver.
2. A vendor invoice is submitted but is not yet approved.

This notification in turn triggers the Approve Vendor Invoice by Type (Substitute) To-Do.

### Recipient

The Approve Vendor Invoice by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the vendor invoice first.

### Workspace

The Approve Vendor Invoice by Type (Substitute) To-Do directs the recipient/s to the Vendor Invoice workspace.

## ApproveVendorSubstitute

This notification is used to inform users about the pending approval of new vendors. It is triggered when:

1. Approval hierarchies are used for vendors. A substitute approver is specified.
2. A vendor is created and submitted.

This notification in turn triggers the Approve Vendor (Substitute) To-Do.

### Recipient

The Approve Vendor (Substitute) To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy. However, the To-Do disappears if the approver approves the vendor first.

### Workspace

The Approve Vendor (Substitute) To-Do directs the recipient/s to the Vendor workspace.

## ApproveVendorSubstituteByType

This notification is used to inform users about pending approval of new vendors, and only applies when using approval hierarchies. It is triggered when:

1. Approval hierarchies are used for vendors. An employee type is specified as substitute approver.
2. A vendor is created and submitted.

This notification in turn triggers the Approve Vendor by Type (Substitute) To-Do.

### Recipient

The Approve Vendor by Type (Substitute) To-Do is received by the following users:

- All users who are assigned the employee type specified as substitute approver. However, the To-Do disappears if another approver/substitute approver approves the vendor first.

### Workspace

The Approve Vendor by Type (Substitute) To-Do directs the recipient/s to the Vendor workspace.

## ApprovedAbsenceCalendarLines

This notification is used to inform the users about recent approval of their absence registrations. It is triggered when:

1. An absence request is approved within the last seven days.

This notification in turn triggers the Approved Absence To-Do.

### Recipient

The Approved Absence To-Do is received by the following users:

- The user whom the absence request concerns

### Workspace

The Approved Absence To-Do directs the recipient/s to the relevant request in the Absence workspace.

## ApprovedAllowanceRequestAbsenceEntries

This notification is used to inform the users about recent approval of their allowance requests. It is triggered when:

1. An allowance request is approved within the last seven days.

This notification in turn triggers the Approved Absence Allowance To-Do.

### Recipient

The Approved Absence Allowance To-Do is received by the following users:

- The user whom the allowance request concerns

### Workspace

The Approved Absence Allowance To-Do directs the recipient/s to the Absence workspace.

## CollectionActivity

This notification is used to inform users about open cash collection events that are assigned to them. It is triggered when:

1. A cash collection event is open on or before the planning starting date specified on the event.
2. An event follow-up date is either today or in the past.

This notification in turn triggers the Collection Activity To-Do.

### Recipient

The Collection Activity To-Do is received by the following users:

- The employee assigned to the event.

## Workspace

The Collection Activity To-Do directs the recipient/s to the Credit Control workspace.

## CreditLimit

This notification is used to inform users when a customer's open accounts receivable reaches a set percentage of their credit limit. It is triggered when:

1. The total sum of unpaid invoices for a customer is within the specified percentage value of their credit limit.

This notification in turn triggers the Credit Control To-Do.

## Recipient

The Credit Limit To-Do is received by the following users:

- The employee assigned as credit controller for the customer.

## Workspace

The Credit Limit To-Do directs the recipient/s to the Credit Control workspace.

## DailyTimeSheetNotCreated

This notification is used to inform users about daily time sheets that are not yet created. It is triggered when:

1. A user fails to create a daily time sheet in the period between the date he was hired and the current date (according to calendar week/working days).

By default, the user is notified about daily time sheets not created within the last two months.

This notification in turn triggers the Daily Time Sheet not Created To-Do.

## Recipient

The Daily Time Sheet not Created To-Do is received by the following users:

- The employee registered on the daily time sheet.

## Workspace

The Daily Time Sheet not Created To-Do directs the recipient/s to the Time & Expenses (Time & Expenses) workspace.

## InvoicesSoonDue

This notification is used to inform users about customer invoices with due dates in five or less days. It is triggered when:

1. A customer invoice is due in five days or less.

This notification in turn triggers the Invoices Soon Due To-Do.

## Recipient

The Invoices Soon Due To-Do is received by the following users:

- The employee assigned as credit controller for the customer.

## Workspace

The Invoices Soon To-Do directs the recipient/s to the Credit Control workspace.

## JobExceedsBudget

This notification is used to inform users about jobs for which the open registrations and previous invoicing combined exceed the latest approved job budget. It is triggered when:

1. A job exceeds the latest approved job budget. If no budget is approved, then no notification is sent.

This notification in turn triggers the Project Exceeds Budget To-Do.

## Recipient

The Project Exceeds Budget To-Do is received by the following users:

- The project manager assigned to the job

## Workspace

The Project Exceeds Budget To-Do directs the recipient/s to the Overview tab of the Jobs workspace.

## JobRiskDue

This notification is used to inform users about risk due dates that are approaching. It is triggered when:

1. A risk is due in 20 days.

This notification in turn triggers the Job Risk Due To-Do.

## Recipient

The Job Risk Due To-Do is received by the following users:

- The employee named as owner of the risk

## Workspace

The Job Risk Due To-Do directs the recipient/s to the Risks sub-tab of the Jobs workspace.

## JobWithoutBudget

This notification is used to inform users when jobs are created without budgets. It is triggered when:

1. A job is created without a budget. If a job budget is created but the job budget lines are subsequently deleted, then no notification is sent.

This notification in turn triggers the Project Without Budget To-Do.

### Recipient

The Project Without Budget To-Do is received by the following users:

- The project manager assigned to the job
- The Employee 7 (the financial employee according to solution setup) assigned to the job

### Workspace

The Project Without Budget To-Do directs the recipient/s to the Job Budgets workspace.

## NewJobCreated

This notification is used to inform users about the creation of jobs. It is triggered when:

1. A job is created.
2. The job is blocked for invoicing, which is how new jobs appear in the solution setup.

This notification in turn triggers the New Project To-Do.

### Recipient

The New Project To-Do is received by the following users:

- The project manager of the job
- The sales person of the job
- The account manager of the job
- Employees 1-10 of the job

### Workspace

The New Project To-Do directs the recipient/s to the Job Overview workspace.

## PresubmittedEmployeeRequisitions

This notification is used to inform users about submitted employee requisitions that need more information before submission for approval. It is triggered when:

1. An express purchase order for a Courier is presubmitted.

This notification in turn triggers the Presubmitted Employee Requisitions To-Do.

### Recipient

The Presubmitted Employee Requisitions To-Do is received by the following users:

- Any user in the group assigned to the notification

### Workspace

The Presubmitted Employee Requisitions To-Do directs the recipient/s to the Purchase Order Administration workspace.

## PrintJobInvoice

This notification is used to inform users about approved invoice drafts and draft credit notes that need to be printed. It is triggered when:

1. A job invoice draft or a draft credit note is approved.

This notification in turn triggers the Print Invoice To-Do.

### Recipient

The Print Invoice To-Do is received by the following users:

- The employee 7 on the project or on the company specific customer setup.
- Only users which are allowed to print invoices in the Users workspace.

### Workspace

The Print Invoice To-Do directs the recipient/s to the Draft Invoices workspace, which is accessible only through notifications.

## RejectedAbsenceCalendarLines

This notification is used to inform users about rejected absence calendar lines. It is triggered when:

1. A submitted absence request is rejected.

This notification in turn triggers the Rejected Absence To-Do.

### Recipient

The Rejected Absence To-Do is received by the following users:

- The user whom the absence request concerns.

### Workspace

The Rejected Absence To-Do directs the recipient/s to the relevant request in the Absence workspace.

## RejectedAllowanceRequestAbsenceEntries

This notification is used to inform users about rejected allowance requests. It is triggered when:

1. A submitted allowance request is rejected.

This notification in turn triggers the Rejected Absence Allowance Request To-Do.

### Recipient

The Rejected Absence Allowance Request To-Do is received by the following users:

- The user whom the allowance request concerns

### Workspace

The Rejected Absence Allowance Request To-Do directs the recipient/s to the Absence workspace.

## RejectedCompanyCustomer

This notification is used to inform users about rejected company customers. It is triggered when:

1. Approval hierarchies are used for company customers.
2. A submitted company customer is rejected.

This notification in turn triggers the Rejected Company Customer To-Do.

### Recipient

The Rejected Company Customer To-Do is received by the following users:

- The user who submitted the rejected company customer

### Workspace

The Rejected Company Customer To-Do directs the recipient/s to the Company Customer workspace.

## RejectedCompanyVendor

This notification is used to inform users about rejected company vendors. It is triggered when:

1. Approval hierarchies are used for company vendors.
2. A submitted company vendor is rejected.

This notification in turn triggers the Rejected Company Vendor To-Do.

### Recipient

The Rejected Company Vendor To-Do is received by the following users:

- The user who submitted the rejected company vendor

### Workspace

The Rejected Company Vendor To-Do directs the recipient/s to the Company Vendor workspace.

## RejectedCustomer

This notification is used to inform users about rejected customers. It is triggered when:

1. Approval hierarchies are used for customers.
2. A submitted customer is rejected.

This notification in turn triggers the Rejected Customer To-Do.

### Recipient

The Rejected Customer To-Do is received by the following users:

- The user who submitted the rejected customer

### Workspace

The Rejected Customer To-Do directs the recipient/s to the Customer workspace.



## RejectedEmployee

This notification is used to inform users about rejected employees. It is triggered when:

1. Approval hierarchies are used for employees.
2. An employee submitted by a user is rejected.

This notification in turn triggers the Rejected Employee To-Do.

### Recipient

The Rejected Employee To-Do is received by the following users:

- The user who submitted the rejected employee.

### Workspace

The Rejected Employee To-Do directs the recipient/s to the Employees workspace.

## RejectedExpenseSheet

This notification is used to inform users about rejected expense sheets. It is triggered when:

1. Approval hierarchies are used for expense sheets.
2. A submitted expense sheet is rejected.

This notification in turn triggers the Rejected Expense Sheet To-Do.

### Recipient

The Rejected Expense Sheet To-Do is received by the following users:

- The user who submitted the expense sheet

### Workspace

The Rejected Expense Sheet To-Do directs the recipient/s to the Time & Expense workspace.

## RejectedExpenseSheetLines

This notification is used to inform users about rejected expense sheet lines. It is triggered when:

1. Approval hierarchies are used for expense sheet lines.
2. A submitted expense sheet line is rejected.

This notification in turn triggers the Rejected Expense Sheet Lines To-Do.

### Recipient

The Rejected Expense Sheet Lines To-Do is received by the following users:

- The user who submitted the expense sheet line

### Workspace

The Rejected Expense Sheet Lines To-Do directs the recipient/s to the Time & Expense workspace.

## RejectedInvoiceDrafts

This notification is used to inform users about rejected invoice drafts. It is triggered when:

1. Approval hierarchies are used for draft invoices.
2. A submitted draft invoice is rejected.

This notification in turn triggers the Rejected Invoice Drafts To-Do.

### Recipient

The Rejected Invoice Drafts To-Do is received by the following users:

- The user who created the invoice draft

### Workspace

The Rejected Invoice Drafts To-Do directs the recipient/s to the Draft Invoices workspace, which is accessible only through notifications.

## RejectedJob

This notification is used to inform users about rejected jobs. It is triggered when:

1. Approval hierarchies are used for jobs.
2. A submitted job is rejected.

This notification in turn triggers the Rejected Job To-Do.

### Recipient

The Rejected Job To-Do is received by the following users:

- The user who submitted the rejected job.

### Workspace

The Rejected Job To-Do directs the recipient/s to the Jobs workspace.

## RejectedJobBudget

This notification is used to inform users about rejected job budgets. It is triggered when:

1. Approval hierarchies are used for job budgets.
2. A submitted job budget is rejected.

This notification in turn triggers the Rejected Project Budget To-Do.

### Recipient

The Rejected Project Budget To-Do is received by the following users:

- The user who submitted the job budget

### Workspace

The Rejected Project Budget To-Do directs the recipient/s to the Jobs workspace.

## RejectedMileageSheet

This notification is used to inform users about rejected mileage sheets, and only applies when using approval hierarchies on mileage sheets. It is triggered when:

1. Approval hierarchies are used for mileage sheets.
2. A submitted mileage sheet is rejected.

This notification in turn triggers the Rejected Mileage Sheet To-Do.

### Recipient

The Rejected Mileage Sheet To-Do is received by the following users:

- The user who submitted the mileage sheet

### Workspace

The Rejected Mileage Sheet To-Do directs the recipient/s to the Time & Expenses workspace.

## RejectedMileageSheetLines

This notification is used to inform users about rejected mileage sheet lines. It is triggered when:

1. Approval hierarchies are used for mileage sheet lines.
2. A submitted mileage sheet line is rejected.

This notification in turn triggers the Rejected Mileage Sheet Lines To-Do.

### Recipient

The Rejected Mileage Sheet Lines To-Do is received by the following users:

- The user who submitted the mileage sheet line

### Workspace

The Rejected Mileage Sheet Lines To-Do directs the recipient/s to the Time & Expenses workspace.

## RejectedPurchaseOrder

This notification is used to inform users about rejected purchase orders. It is triggered when:

1. Approval hierarchies are used for purchase orders.
2. A submitted purchase order is rejected.

This notification in turn triggers the Rejected Purchase Order To-Do.

### Recipient

The Rejected Purchase Order To-Do is received by the following users:

- The user who submitted the purchase order

### Workspace

The Rejected Purchase Order To-Do directs the recipient/s to the Purchase Order workspace.

## RejectedTimeSheetApprovalHierarchy

This notification is used to inform users about rejected time sheets. It is triggered when:

1. Approval hierarchies are used for time sheets.
2. A submitted time sheet is rejected.

This notification in turn triggers the Rejected Time Sheet To-Do.

### Recipient

The Rejected Time Sheet To-Do is received by the following users:

- The user who submitted the time sheet

### Workspace

The Rejected Time Sheet To-Do directs the recipient/s to the Time & Expense workspace.

## RejectedTimeSheetLines

This notification is used to inform users about rejected time sheet lines. It is triggered when:

1. Approval hierarchies are used for time sheet lines.
2. A submitted time sheet line is rejected.

This notification in turn triggers the Rejected Time Sheet Lines To-Do.

### Recipient

The Rejected Time Sheet Lines To-Do is received by the following users:

- The user who submitted the time sheet line

### Workspace

The Rejected Time Sheet Lines To-Do directs the recipient/s to the Time & Expense workspace.

## RejectedUserInformation

This notification is used to inform employees about rejected users. It is triggered when:

1. Approval hierarchies are used for users.
2. A submitted user is rejected.

This notification in turn triggers the Rejected User Information To-Do.

### Recipient

The Rejected User Information To-Do is received by the following users:

- The employee who submitted the user

### Workspace

The Rejected User Information To-Do directs the recipient/s to the Users workspace.

## RejectedVendor

This notification is used to inform users about rejected vendors. It is triggered when:

1. Approval hierarchies are used for vendors.
2. A submitted vendor is rejected.

This notification in turn triggers the Rejected Vendor To-Do.

### Recipient

The Rejected Vendor To-Do is received by the following users:

- The user who submitted the vendor

### Workspace

The Rejected Vendor To-Do directs the recipient/s to the Vendor workspace.

## RejectedVendorInvoice

This notification is used to inform users about rejected vendor invoices. It is triggered when:

1. Approval hierarchies are used for vendor invoices.
2. A submitted vendor invoice is rejected.

This notification in turn triggers the Rejected Vendor Invoice To-Do.

### Recipient

The Rejected Vendor Invoice To-Do is received by the following users:

- The user who submitted the vendor invoice

### Workspace

The Rejected Vendor Invoice To-Do directs the recipient/s to the Rejected Vendor Invoice workspace.

## SubmitAllowanceRequestAbsenceEntries

This notification is used to inform users about the pending submission of created allowance requests. It is triggered when:

1. The user created an allowance request within the last 12 days, but did not submit it.

This notification in turn triggers the Submit Absence Allowance Request To-Do.

### Recipient

The Submit Absence Allowance Request To-Do is received by the following users:

- The user whom the allowance request concerns.

### Workspace

The Submit Absence Allowance Request To-Do directs the recipient/s to the Absence workspace.

## SubmitCompanyCustomer

This notification is used to inform users about the pending submission of company customers. It is triggered when:

1. An approval hierarchy with multiple submission steps is created for company customers.
2. The preceding step is approved.
3. A company customer must be submitted for approval as part of the process.

This notification in turn triggers the Submit Company Customer To-Do.

### Recipient

The Submit Company Customer To-Do is received by the following users:

- The user defined as the receiver of the notification after the approval specified in the approval hierarchy

### Workspace

The Submit Company Customer directs the recipient/s to the Company Customer workspace.

## SubmitCompanyVendor

This notification is used to inform users about the pending submission of company vendors. It is triggered when:

1. An approval hierarchy with multiple submission steps is created for company vendors.
2. The preceding step is approved.
3. A company vendor must be submitted for approval as part of the process.

This notification in turn triggers the Submit Company Vendor To-Do.

### Recipient

The Submit Company Vendor To-Do is received by the following users:

- The user defined as the receiver of the notification after the approval specified in the approval hierarchy

### Workspace

The Submit Company Vendor To-Do directs the recipient/s to the Company Vendors workspace.

## SubmitCustomer

This notification is used to inform users about the pending submission of customers. It is triggered when:

1. An approval hierarchy with multiple submission steps is created for customers.
2. The preceding step is approved.
3. A customer must be submitted for approval as part of the process.

This notification in turn triggers the Submit Customer To-Do.

## Recipient

The Submit Customer To-Do is received by the following users:

- The user defined as the receiver of the notification after the approval specified in the approval hierarchy

## Workspace

The Submit Customer To-Do directs the recipient/s to the Customers workspace.

## SubmitDailyTimeSheet

This notification is used to inform users about the pending submission of daily time sheets. It is triggered when:

1. A daily time sheet is created but not yet submitted.
2. The daily time sheet is dated within the last two months.

This notification in turn triggers the Submit Daily Time Sheet To-Do.

## Recipient

The Submit Daily Time Sheet To-Do is received by the following users:

- The user registered on the daily time sheet

## Workspace

The Submit Daily Time Sheet To-Do directs the recipient/s to the Time & Expenses workspace.

## SubmitEmployee

This notification is used to inform users about the pending submission of employees, and only applies when approval is enabled for employees. It is triggered when:

1. Approval is required for employees in Approval Hierarchy Rules.
2. An employee is created but not submitted.

This notification in turn triggers the Submit Employee To-Do.

## Recipient

The Submit Employee To-Do is received by the following users:

- The user who created the employee

## Workspace

The Submit Employee To-Do directs the recipient/s to the Employees workspace.

## SubmitExpenseSheet

This notification is used to inform users about the pending submission of expense sheets. It is triggered when:

1. An expense sheet is created but not yet submitted.

2. The expense sheet is created within the last two months.

This notification in turn triggers the Submit Expense Sheet To-Do.

### Recipient

The Submit Expense Sheet To-Do is received by the following users:

- The user who created the expense sheet
- The secretary of the user who created the expense sheet

### Workspace

The Submit Expense Sheet To-Do directs the recipient/s to the Time & Expenses workspace.

## SubmitFinanceBudget

This notification is used to inform the users that a sum budget needs to be submitted. It is triggered when:

1. A sum budget is created or updated.
2. All the sub budgets are approved.
3. The sum budget is not yet submitted.

This notification in turn triggers the Submit Finance Budget To-Do.

### Recipient

The Submit Finance Budget To-Do is received by the following users:

- The user responsible for the finance budget

### Workspace

The Submit Finance Budget To-Do directs the recipient/s to the Finance Budgets workspace.

## SubmitInvoiceDraft

This notification is used to inform users about draft invoices ready for completion. It is triggered when:

1. An invoice selection is approved.

This notification in turn triggers the Submit Invoice Draft To-Do.

### Recipient

The Submit Invoice Draft To-Do is received by the following users:

- The user approving the invoice selection

### Workspace

The Submit Invoice Draft To-Do directs the recipient/s to the Draft Invoices workspace, which is accessible only through notifications.

## SubmitJob

This notification is used to inform users about the pending submission of jobs. It is triggered when:



## Notifications

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1. An approval hierarchy with multiple submission steps is created for jobs.
2. The preceding step is approved.
3. A job must be submitted for approval as part of the process.

This notification in turn triggers the Submit Job To-Do.

### Recipient

The Submit Job To-Do is received by the following users:

- The user defined as the receiver of the notification after the approval specified in the approval hierarchy.

### Workspace

The Submit Job To-Do directs the recipient/s to the Jobs workspace.

## SubmitMileageSheet

This notification is used to inform users about the pending submission of mileage sheets. It is triggered when:

1. A mileage sheet is created but not yet submitted.
2. The mileage sheet is created within the last two months.

This notification in turn triggers the Submit Mileage Sheet To-Do.

### Recipient

The Submit Mileage Sheet To-Do is received by the following users:

- The user who created the mileage sheet
- The secretary of the user who created the mileage sheet

### Workspace

The Submit Mileage Sheet To-Do directs the recipient/s to the Time & Expenses workspace.

## SubmitTimeSheet

This notification is used to inform users about the pending submission of time sheets. It is triggered when:

1. A time sheet is created but not yet submitted.
2. The time sheet period is within the last two months.

This notification in turn triggers the Submit Time Sheet To-Do.

### Recipient

The Submit Time Sheet To-Do is received by the following users:

- The user registered on the time sheet
- The secretary of the user who created the time sheet

## Workspace

The Submit Time Sheet To-Do directs the recipient/s to the Time & Expenses workspace.

## SubmitUserInformation

This notification is used to inform employees about the pending submission of users. It is triggered when:

1. Approval is required for users in Approval Hierarchy Rules.
2. A new user is created but not submitted.

This notification in turn triggers the Submit User Information To-Do.

## Recipient

The Submit User Information To-Do is received by the following users:

- The user who created the new user.

## Workspace

The Submit User Information To-Do directs the recipient/s to the Users workspace.

## SubmitVendor

This notification is used to inform users about the pending submission of vendors. It is triggered when:

1. An approval hierarchy with multiple submission steps is created for vendors.
2. The preceding step is approved.
3. A vendor must be submitted for approval as part of the process.

This notification in turn triggers the Submit Vendor To-Do.

## Recipient

The Submit Vendor To-Do is received by the following users:

- The user defined as the receiver of the notification after the approval specified in the approval hierarchy

## Workspace

The Submit Vendor To-Do directs the recipient/s to the Vendors workspace.

## SubstituteTask

This notification is used to inform users about pending approval tasks. It is triggered when:

1. There is an active approval task, and the user is specified as a substitute approver.

This notification in turn triggers the Substitute Tasks To-Do.

## Recipient

The Substitute Tasks To-Do is received by the following users:

- The user defined as substitute approver in the approval hierarchy

## Workspace

The Substitute Tasks To-Do directs the recipient/s to the Approvals workspace.

## TaskFromEmployeeControl

This notification is used to inform users who are assigned to a specific job. It is deactivated when the job is closed, or when the assignment or task is marked as Completed. It is triggered when:

1. A job is assigned the **Notify Employee if listed in Employee Control** job parameter attribute, and this parameter is set to **Yes**.
2. A user is specified in the Employee Control workspace, and is therefore allowed to register time and expenses on the job.

This notification in turn triggers the Task on Project To-Do.

## Recipient

The Task on Project To-Do is received by the following users:

- The user assigned a task on the job

## Workspace

The Task on Project To-Do directs the recipient/s to the Task workspace.

## TimeSheetNotCreated

This notification is used to inform users about missing time sheets. It is triggered when:

1. A user did not create a weekly time sheet in the period between the date he was hired and the current date (according to calendar weeks with working days).

By default, the user is notified about time sheets not created within the last two months.

This notification in turn triggers the Time Sheet not Created To-Do.

## Recipient

The Time Sheet not Created To-Do is received by the following users:

- The employee registered on the time sheet

## Workspace

The Time Sheet not Created To-Do directs the recipient/s to the Time & Expenses workspace.

## UnassignedVendorInvoices

This notification is used to inform users about the pending creation of fixed assets. It is triggered when:

1. An invoice allocation is marked as a fixed asset but is not yet created as a fixed asset.
2. The vendor invoice is posted.

This notification in turn triggers the Unassigned Vendor Invoices To-Do.

## Recipient

The Unassigned Vendor Invoices To-Do is received by the following users:

- Anyone in the group assigned to the notification

## Workspace

The Unassigned Vendor Invoices To-Do directs the recipient/s to the Fixed Asset workspace.

## UnreadVendorInvoiceMessage

This notification is used to inform users about any unread messages in a conversation regarding a vendor invoice. It is triggered when:

1. A message is added to a conversation regarding a specific vendor invoice.

This notification in turn triggers the Unread Vendor Invoice Message To-Do.

## Recipient

The Unread Vendor Invoice Message To-Do is received by the following users:

- Any employee who is already part of the conversation, or was added to the conversation by another employee before the message was sent.

## Workspace

If the vendor invoice is unposted, the Unread Vendor Invoice Message To-Do directs the recipient to the Conversation sliding panel of the Vendor Invoice workspace. If the vendor invoice is already posted, the Unread Vendor Invoice Message To-Do directs the recipient to the Vendor Invoice workspace.

## VendorInvoicesForAllocation

This notification is used to inform users about unallocated vendor invoices. It is triggered when:

1. A vendor invoice is not allocated.
2. The current user is responsible for the allocation.

This notification in turn triggers the Vendor Invoices for allocation To-Do.

## Recipient

The Vendor Invoices for allocation To-Do is received by the following users:

- The employee responsible for allocating the vendor invoice/s

## Workspace

The Vendor Invoices for allocation To-Do directs the recipient/s to the Vendor Invoices workspace.

## VendorInvoicesForAllocationNoResponsiblePerson

This notification is used to inform users when no person is assigned to allocate specific vendor invoices. It is triggered when:

1. A vendor invoice is not allocated.
2. No user is specified as responsible on the vendor invoice.

## Notifications

---

This notification in turn triggers the Vendor Invoices without responsible To-Do.

### Recipient

The Vendor Invoices without responsible To-Do is received by the following users:

- All users with access to the unallocated vendor invoice that has no one assigned to allocate it

### Workspace

The Vendor Invoices without responsible To-Do directs the recipient/s to the Vendor Invoices workspace.

## Email Alerts

Maconomy users find out about their pending tasks and updates to certain records via the Notifications functionality. Notifications trigger To-Dos, which are listed in the To-Do portion of the Workspace Client. For example, by looking at this section of the interface, a supervisor can see any time sheets that need approval.

The Email Alerts feature works with Notifications by distributing emails to employees about their current notifications without them having to log on to Maconomy. This feature also allows you to do the following:

- Send email alerts in test mode, and proofread the contents before sending out the alerts to users.
- Send out the alerts manually, or automatically by enabling a script.
- Use logs to capture information about email alerts sent out and their recipients. The logs are saved on the Maconomy server, or sent to a specified log mailbox.
- Send out an email alert to an employee, and to that employee's supervisor.
- Create customized email alert templates to fit specific criteria. For example, you can save time and effort by creating a template for a specific set of notifications. You can also create a different template for each language used in the countries where your organization operates.

As a system administrator or super user, make sure certain prerequisites are in place before setting up email alerts. Details about prerequisites and setup are provided below.

**Note:** As a user, clicking the hyperlink in an email alert that you received only opens the Workspace Client, not the specific workspace where you need to address the notification you received.

## Before You Begin

The following prerequisites must be met before setting up email alerts:

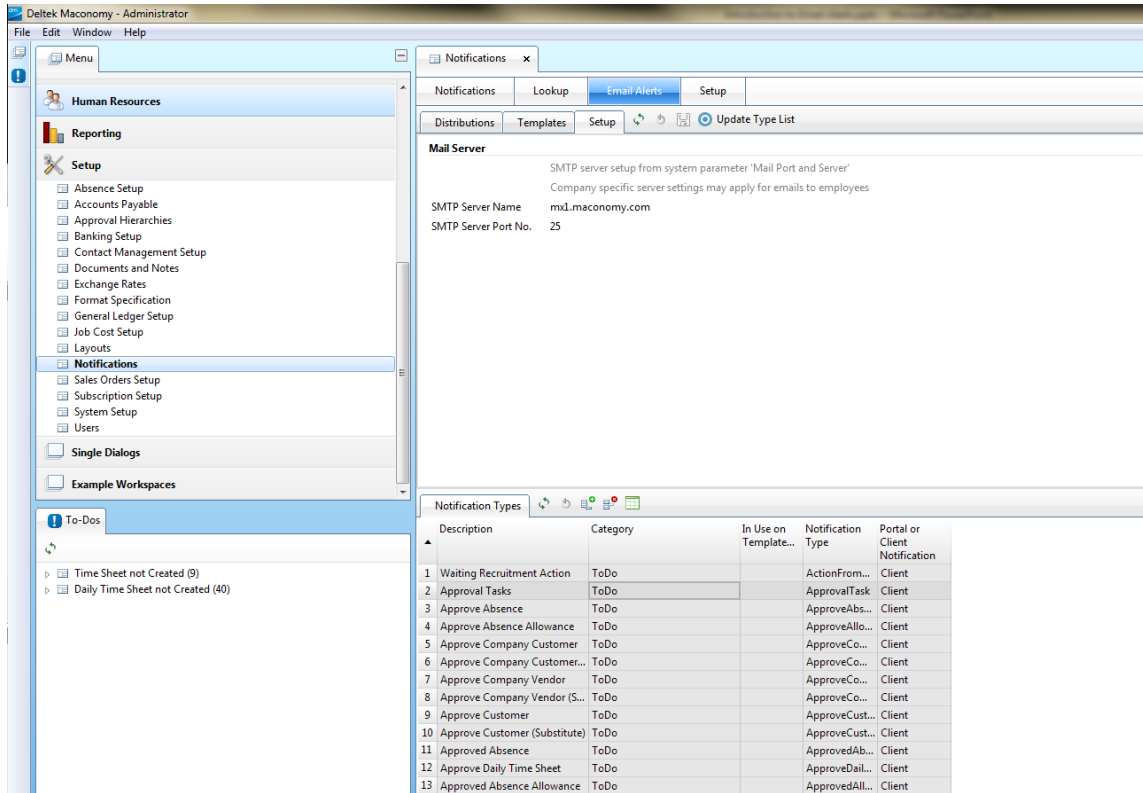
- Define the mail server and port number. Use the System Setup workspace (**Setup » System Setup » Parameters and Numbers » System Parameters**) to enter values for the Mail Port and Server system parameter.

**Note:** In the case of multi-company organizations, you have the option to apply mail server and port information to the entire system, or specify a different set of values for each company.

- Assign notifications to groups using the Notifications workspace (**Setup » Notifications » Setup » Types**).  
Groups control the workspaces and records users can access, and the type of access they have (read/write/create/delete). To enable specific users to receive certain notifications, assign these notification types and users to the same group. Once email alerts are set up, the users will also receive alerts for these notifications.
- Assign email addresses to users using the Employees workspace (**Human Resources » Employees**). Maconomy sends alerts to a user via the email address specified for that user.

# Setup

Use the Notifications workspace (**Setup » Notifications**) to set up email alerts.



To configure email alerts, use the following sub-tabs under the Email Alerts tab:

1. **Setup** — Use this sub-tab to update the list of notifications set up in Maconomy. You can set up email alerts for all the notifications included in the updated list.

**Note:** When you click the **Update Type List** action, Maconomy retrieves Workspace Client notifications, as well as Portal To-Dos and Alerts.

2. **Templates** — Use this sub-tab to prepare email templates, and assign specific notifications to each template.
3. **Distributions** — Use this sub-tab to manually send out email alerts for specific templates.

Notifications have to be calculated (or computed) by Maconomy before they are displayed in the To-Do portion of the Workspace Client, and before email alerts can be generated for them. While both the user and the system administrator can calculate notifications manually, it is more efficient to do this automatically for all users (regardless of whether they are logged on to Maconomy at the time of calculation). Aside from setting up automatic calculation/recalculation of notifications, you can also set up the automatic distribution of email alerts.

### Note: Schedule Distribution at Night

Maconomy calculates notifications at a slower rate when there are more users logged on and submitting records. This could result in Maconomy sending out email alerts before all notifications have been calculated. To avoid this, schedule automatic calculation/recalculation at a time when there are less/no users logged on (for example, at night), and then schedule the automatic distribution of email alerts after recalculation is finished.

## Email Alert Templates

When you create email templates for notifications that are sent to specific distribution groups, you can customize them to include links to specific notifications or to-dos within the Workspace Client. If you use iAccess, you can also add a link to the iAccess login page.

Email alerts can provide you with details such as the date or job number of a notification or to-do. Click the **Include Notification Details** field in the Email Alerts workspace to enable this functionality.

There are separate lists for each notification and to-do, and each list provides the total number of items that require your attention. You can choose what should be included in the template.

If you have several notifications, only the first three items are displayed, and each is a clickable link that redirects you to the specific item in the workspace client. A summary showing the number of other notifications that require attention is shown at the end of the list.

If you have notifications and to-dos that may be handled in iAccess instead of the workspace client, a link to the iAccess login page may also be provided in the email to enable you to easily access the system.

To use this functionality, the **URL for iAccess** system parameter must contain a URL that redirects the user to iAccess.

## Procedures

### Create Email Alert Template

You can customize email alerts to display information that is sent to either employees or supervisors.

#### To create a template:

1. Go to **Setup » Notifications » Email Alerts » Templates » Template**.
2. Click **New Email Alerts Template**.
3. In the **Name** field, enter a name for your template. This is a mandatory field.
4. In the **Description** field, enter a description for your template.
5. In the **Access Level** field, enter or select an access level to specify which users can view the template.
6. In the **Email Subject** field, enter text to use as the subject line for every email alert.
7. In the **Email Subject, Supervisor** field, enter text to use as the subject line for every email alert sent to supervisors.
8. In the **Email Opening Paragraph** field, enter text to use as the first paragraph in every email alert.
9. In the **Email Opening Paragraph, Supervisor** field, enter text to use as the first paragraph in every email alert sent to supervisors.



10. In the **Email Closing Paragraph** field, enter text to use as the last part of the email body in each email alert.
11. In the **Reply-to Name** field, enter the name to display as the sender of the email alert.
12. In the **Reply-to Email Address** field, enter the email address to display as the sender of the email alert. This also serves as the email address to which users can reply. This is a mandatory field.
13. In the **Portal Login URL** field, enter the HTTP URL to the portal login page if portal to-dos or alerts are included in the email alert.
14. In the **Workspace Client Link** field, specify whether you want to include links to workspace client to-dos or notifications in the email alert.
15. In the **iAccess Link** field, specify whether you want to include a link to the iAccess login page.
16. In the **Employee No.** fields, enter or select the range of employees who should receive email alerts.
17. In the **Company No.** fields, enter or select a range of companies that should receive email alerts.
18. In the **Access Level** fields, enter or select the access level types that should receive email alerts.
19. In the **Remark 1-5** fields, enter remarks regarding the email alerts as needed.
20. In the **Week Calendar** fields, enter or select the week calendar number that should be included in email alerts.
21. In the **Position** fields, enter a range of positions to apply to the email alert template.
22. In the **Employee Type** fields, select which employee types should receive email alerts.
23. In the **Primary Employee Category** fields, select which employee category types should receive email alerts.
24. In the **Sales Employee** field, specify whether sales employees should receive email alerts.
25. In the **Account Manager** field, specify whether account managers should receive email alerts.
- 26.
27. In the **Must Use Timesheets** field, specify whether the users receiving email alerts must utilize timesheets.
28. In the **Location** fields, enter or select a range of locations to apply to the email alert template.
29. In the **Entity** fields, enter or select a range of entities to apply to the email alert template.
30. In the **Project** fields, enter or select a range of projects to apply to the email alert template.
31. In the **Purpose** fields, enter or select a range of purposes to apply to the email alert template.
32. In the **Spec. 2-3** fields, enter or select a range of specifications to apply to the email alert template.
33. In the **Local Spec. 1-3** fields, enter or select a range of local specifications to apply to the email alert template.
34. Click **Save**.

## Add Notification Types to Email Alert Templates

When you have created an email alert template, you can choose which notification types should be included in the email. You can also specify whether the email alert should include detailed information regarding each notification.

**To add notification types:**

1. Go to **Setup » Notifications » Email Alerts » Templates » Template » Notification Types**.
2. In the **Notification Type** field, select or enter a notification type.
3. Select the **Include Notification Details** check box if you wish to provide a link and details to the notification type in the email alert.
4. Select the **Send to Supervisor** check box if you wish to include the notification type in emails sent to supervisors.
5. Click **Save**.

## Setup Instructions

**To add a link to iAccess in email alerts:**

1. Go to **System Setup » Parameters and Numbers » System Parameters**.
2. Double-click the **URL for iAccess** parameter.
3. On the System Parameter sub-tab, enter the iAccess URL in the **URL for iAccess** field.
4. Click **Save**.

## System Parameters

**URL for iAccess**

If you have iAccess notifications or to-dos, enter the URL to the iAccess login page to be sent in email alerts. This link is then included appropriately in the emails list of notification.

If you do not enter a URL, an error message displays if any email alerts templates are set to include a link to iAccess.

## Financial Budgeting

This appendix details the elements used in Financial Budgeting, such as templates and budget lines, as well as key processes.

### Overview of Budget Templates

This section provides an overview of the budget templates, and how they work within Maconomy.

#### Information in Templates

The templates include the following information:

- Fiscal year and fiscal year template of the budgets
- Exchange rate table to be used when converting between currencies
- Lines of which each budget is composed
- Hierarchy of the departments of the organization. This is used when aggregating the values up through the organization.
- Employee categories the budget uses, as well as default values
- Allocation and surcharge keys which are available on the budgets
- How dimensions should be copied on settlement lines
- How employees are linked to departments

#### Financial Budgets and Maconomy

Financial budgets that are created based on templates are used to provide all information specified in the template. This information is entered and stored in Maconomy in numerous ways, including

- Entering information into P&L
- Using predefined sub-budgets for:
  - Employee related costs and incomes
  - Direct costs
  - Intercompany settlements
- Creating sub-budgets per P&L account. Such sub-budgets can be created by each user of the budget.

Note that Budget approval is conducted on Sum Budget (described later in the document) in the Subordinate Budget Tab.

### Getting Started

#### Finance Budgeting Workflow

The budgeting process in the Maconomy Financial Budgeting module is built around three main steps, which must be performed in order:

1. Setting up a budget template (including creating budgets from the template)

2. Populating budgets with data
3. Reviewing and approving budgets

There are several different activities to be performed within each of above mentioned steps. The *Getting Started* section below describes a suggested order and steps within each procedure.

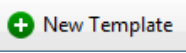
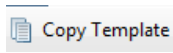
## Set Up Budgets Template

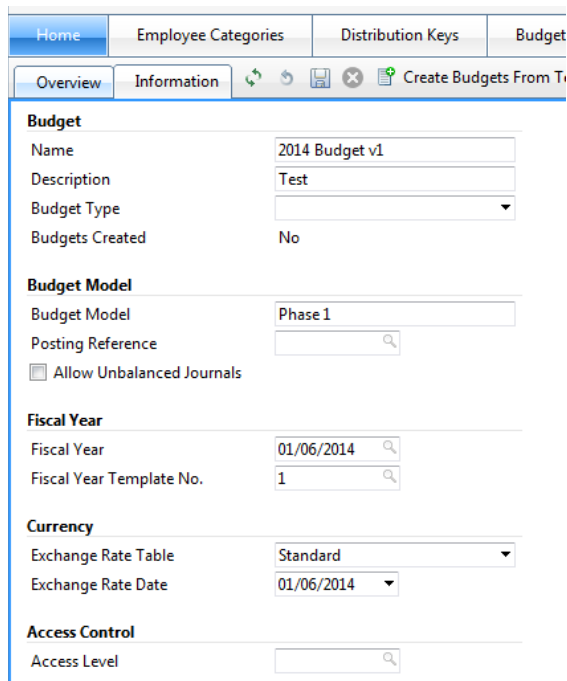
Setting up budget templates is the first step in the budgeting process. To set up budget templates, you follow this process:

- Create the template and enter basic information
- Create a budget hierarchy
- Create a budget Chart of Account
- Populate Employee Categories
- Deploy the templates

## Create the Template and Set Up Basic Information

To create a template, follow these steps:

1. Click  to create a new template, or  to create a template based on existing template.
2. On the Information tab, complete fields such as Name, Description, and Budget Type to indicate basic information about the budget, as displayed on the following screenshot.



The screenshot shows the 'Budget' form with the 'Information' tab selected. The form contains several sections with input fields:

- Budget Section:**
  - Name: 2014 Budget v1
  - Description: Test
  - Budget Type: (dropdown menu)
  - Budgets Created: No
- Budget Model Section:**
  - Budget Model: Phase 1
  - Posting Reference: (text field with search icon)
  - ☐ Allow Unbalanced Journals
- Fiscal Year Section:**
  - Fiscal Year: 01/06/2014 (with search icon)
  - Fiscal Year Template No.: 1 (with search icon)
- Currency Section:**
  - Exchange Rate Table: Standard (dropdown menu)
  - Exchange Rate Date: 01/06/2014 (dropdown menu)
- Access Control Section:**
  - Access Level: (text field with search icon)

**Note:** Access levels shown in the Access Control field use the same functionality as core Maconomy. This means that if you need any access controls specific for budgeting purposes, you must create these controls in core Maconomy.

- Click **Save**.

## Create Budget Hierarchy

Budget Hierarchy includes all business units which must submit their budgets. In Financial Budgeting, they are organized in tree-like structure.

▲>> Name	Responsible	Company Name	Currency	Access Level
1 ▢ <b>Head Quarters</b>	<b>Laurie Forbes</b>	<b>CPA Operating One LLP</b>	<b>USD</b>	<b>100</b>
2 Office 1.2	Paul Mackey	CPA Operating One LLP	USD	100
3 ▢ <b>Region 1</b>	<b>Louise Harrington</b>	<b>CPA Operating Two LLP</b>	<b>USD</b>	<b>100</b>
4 Office 1.1	Sean Williams	CPA Operating Two LLP	USD	100
5 ▢ <b>Region 2</b>	<b>Scarlett Low</b>	<b>CPA Operating One LLP</b>	<b>USD</b>	<b>100</b>
6 Office 2.1	Art Rivers	CPA Operating One LLP	USD	100
7 Office 2.2	Ben Hunter	CPA Operating One LLP	USD	100
8 ▢ <b>Region 3</b>	<b>Isabel Wong</b>	<b>CPA Operating One LLP</b>	<b>USD</b>	<b>100</b>
9 ▢ <b>Office 3.1</b>	<b>Mike Burlew</b>	<b>CPA Operating One LLP</b>	<b>USD</b>	<b>100</b>
10 Office 3.1.1	Ben Bratt	CPA Operating One LLP	USD	100
11 Office 3.1.2	Mark Drexler	CPA Operating One LLP	USD	100
12 Office 3.2	Annie Leonard	CPA Operating One LLP	USD	100

Dark gray lines with bold font are the **Sum Budgets** (described later in this document), which are used as a consolidation points for all subordinate budgets. Light grey lines are the **Main Budgets** which are used for the budgeting.

To create a budget hierarchy, you must first create a budget unit. You can enter the needed information in each column visible on the workspace. Additionally, you can quickly customize which columns appear by right-clicking on the column header and choosing the *Customize Column* option.

### To create a budget unit, follow these steps:

- In the **Name** column, enter the name of the budget unit.
- In the **Responsible** column, specify the employee(s) responsible for submitting the budget.
- In the **Company** column, specify the related company. Budget template can use all Companies available in the Maconomy system.
- In the **Currency** column, indicate the currency of the budgeting unit. Each budgeting unit can have each one currency. Conversion will be made based on information specified in exchange rate table set in main information in the template.

**Note:** On the right side assistant you can specify dimensions in order to better identify this particular budgeting unit. Dimensions used in Finance Budgeting are the same as used in core Maconomy.

- Click **Save**.

## Create Budget Chart of Account

After the budget unit structure is complete, create a budget-specific Chart of Accounts (CoA).

Name	Type	Income	Transfer	Distribution Key
1 Net Result	Sum	<input type="checkbox"/>	No	
2 Total Direct Costs	Sum	<input type="checkbox"/>	No	
3 Travel	Direct Cost	<input checked="" type="checkbox"/>	No	
4 IT expenses	Direct Cost	<input type="checkbox"/>	No	Monthly split
5 Total Employee Costs	Employee	<input checked="" type="checkbox"/>	No	
6 Total Salary	Salary	<input checked="" type="checkbox"/>	No	
7 Social Insurance	Manual	<input checked="" type="checkbox"/>	No	
8 Wages	Manual	<input checked="" type="checkbox"/>	No	
9 Travel	Manual	<input type="checkbox"/>	No	

CoA structure follows the same logic as the budgeting structure, including **Sum Lines**, used for summarizing all subordinate lines, and **Main Lines** where budgeting is done.

**To create a Chart of Accounts, follow these steps:**

1. In the **Name** column, enter the name of the Chart of Accounts.
2. In the **Type** column, select whether the line type (which are detailed later in this document). Line types are used for defining how information on this particular line is provided.
3. In the **Income** column, select the check box to indicate if this account is revenue or de-select to indicate if this is a cost income.
4. In the **Transfer** column, indicate if the distribution key is supposed to be used for this particular account. Distribution Keys are explained later in this document.

**Note:** In right side assistant budget CoA can be linked to actual CoA from Maconomy. This links will be later on used in reporting (budget vs. actual).

Account	Actuals, Account
Description	Account
Name	-

## Add Dimensions

If needed, add dimensions to identify a particular account. However, note that they cannot contradict dimensions set in the budget hierarchy.

**To add dimensions, follow these steps:**

1. If revenue is to be automatically calculated based on income generated by individual employees, assign at least one account line to a **Revenue** line type.
2. Use the three additional tabs in the Budget workspace to set parameters:

- **Sub Budgets** – Use to configure sub-budgets that are not pre-defined. This is an optional parameter.
- **Settlement Setup** – Use to for configure Intercompany Settlements. This an optional parameter.
- **Employee Setup** – Use to establish a Maconomy dimension based on which Employees are linked to which budgeting departments. If the Employee sub-budget is used, this parameter must be defined.

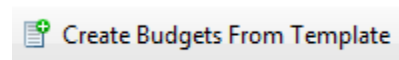
These tabs are explained in more details later on in this document.

## Set Up Employee Categories

After creating the budget hierarchy is complete, next provide information about employee categories. This can be done in the Employee Categories tab. Use the **Fetch Categories** action to transfer employee categories from Maconomy. All information can be edited. Add new columns through **Home » Information** in the Unproductive Time and Productive Time islands:

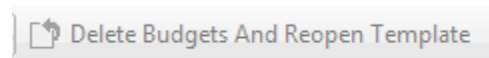
## Deploy Templates

Once all of the above steps are complete, the template can be deployed to all budgeting units. To deploy the template, click **Create Budgets From Template**.



This action freezes the budget template from editing and creates budgets for each budgeting unit defined in the Budget Hierarchy tab.

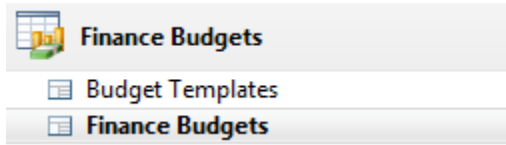
If template must be edited, click the **Delete Budgets And Reopen Template** action:



Note that this deletes all existing budgets including any information in them.

## Interface Overview

Click **Finance Budgets** to open the workspace.



## Overview of Budget Template Lines

Once users access this workspace, they see list of all budgets to which they have access. Open a budget via double click.

- Budget Lines tab is the main tab, where all the information is automatically and instantly summarized.
- Depending on the line assigned to particular account, you can type information directly into the budget or via one of the sub-budgets.
- White lines indicate they can be edited directly in Budget Lines tab. Gray lines indicate they are accessible via sub-budgets.

## Employee Sub-budget

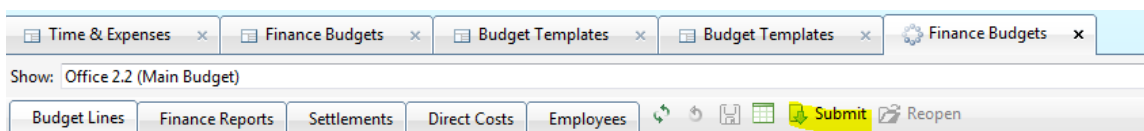
- This sub-budget consist of two tabs: Costs and Incomes.
- Tab cost enables budgeting on all lines which were created under line type Employee.
- List of employees can be entered manually by clicking on Create Employee button or by fetching them from Maconomy.
- The same list of employees is used for Costs and Income tabs.
- Tab Income consists of all columns defined in Employee Category tab in the workspace Budget Templates. Based on information provided in this tab, revenue for this budgeting unit can be calculated.

## Direct Costs Sub-Budget

In this sub-budget, you can enter specification for all direct costs. In the top table, additional “dimensions” (projects, sub-departments, and so on) can be specified and annual values for them can be entered.

## Budget Submission

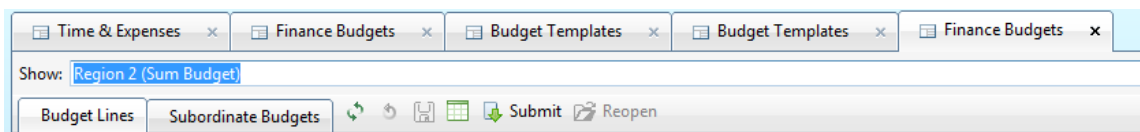
When the budget is ready, submit it for approval by clicking *Submit* button in *Budget Lines* tab.



## Review and Approval Process

Employees responsible for Sum Budgets will have access to consolidated information of all of their subordinate budgets (Budget Lines tab) and they can review each budget separately (Subordinate Budgets tab).





In the Subordinate Budgets tab, there is a dashboard available when the status of all subordinate budgets is visible and actions for approving or approval removal are available.

If this sum budget is not the final sub budget, it can be also submitted for further approvals.

## Description of Functionalities

### Template

The budget template contains the following:

- Fiscal year and fiscal year template of the budgets
- Exchange rate table for converting between currencies
- Lines that compose each budget
- Hierarchy of the departments of the organization, used when aggregating values throughout the organization
- Employee categories with default values for use in the budget
- Allocation and surcharge keys available on the budgets
- Procedure on copying dimensions on settlement lines
- Relationships between employees and departments

Templates can be created for each fiscal year to accommodate the needs for versioning budgets.

When a template is fully set up, it is sent out to the departments specified in the budget hierarchy so a budget can be created for each department. After a budget is created, several parts of the template are locked in and cannot be changed. If an error is detected on the template, such as a missing line or incorrect order, then reopen the template using a predefined action. However, this action causes removal of all budgets created from this template, and thus, all values entered on any of these budgets will be lost.

### Budget Hierarchy

The budget hierarchy represents the departments within the organization that should have a budget, wherein each department is represented as a line in a tree structure. A line with one or more subordinate lines within the structure represents a department that is superior to the departments that are represented by subordinate lines.

For each line in the tree structure, specify the following information:

- Department name
- Name of the employee responsible for filling out and submitting the budget
- Company dimension set on all leaf lines
- Currency used on the budget by the department

Additionally, the following information can be specified:

- **Dimensions of a specific department** — Any dimension specified on a line in the tree structure is automatically inherited by the subordinate lines and departments.
- **Access level** — An access level determines which budgets are accessible to each user

## Budget Lines

All lines on the budget template appear on all budgets created from this template.

On each line of the budget template you must specify the following:

- Line name
- Line type
- Line definition as income or expense line

The budget template also identifies whether or not the line should be transferred to the budget journal when budgets are approved. Direct Cost and External Settlements lines can be set not to be transferred; however, any Direct Cost lines and Settlement lines on sub budgets should be transferred.

Additionally, the following information can be specified:

- **Line dimensions** — Any dimension specified on a budget hierarchy line will override the dimension specified on the line.
- **Dimension interval** — The dimension interval is used to retrieve actual registrations in Maconomy that are related to this line.
- **Reference line** — For calculation lines, a reference line could be specified. The values on the calculation line are calculated on the basis of the reference line.
- **Default distribution** — For manual, calculation, salary, direct cost, and revenue lines, a default distribution can be set.

## Settlement Setup

Part of the new budgeting functionality is to allow users to register settlements against another department (such as purchases from/sales to), as described in the following sections. To ensure that each registration is correct, some of the dimensions on the settlements may be set automatically to the values of the dimensions of the other department/budget. For instance, the Entity dimension on the settlement line can be automatically set to the Location dimension of the referenced budget. The budget template allows the user to set up which dimensions on the settlement lines should automatically be set and which dimensions of the referenced budget the values should be copied from.

## Employee Setup

One feature of the new budget functionality is to enable users to manage budgets for employees already in Maconomy. In order for a user to easily fetch employee data from Maconomy into the finance budget, dimensions to be used to link employees to their departments/budgets should be set up first. The budget template allows a user to set up which dimensions correspond to an employee and which dimensions match the department budget. Any dimension not specified to match a dimension on the budget will not be used to filter employee data that can be fetched into the finance budget.

## Employee Categories

Part of the budget template includes setting up employee categories for use with budgeting on employees. The budget functionality allows the user to easily fetch existing employee categories from Maconomy into the finance budget, which can then be manipulated to meet expected categories for a

specified fiscal year. Any changes made on employee categories in the budget template do not affect the 'original' employee category in Maconomy. You can override existing values on the employee category, such as names, percentages, rates, and hours, to reflect current expectations and default values used on employees in the budgets.

## Budget Types

There are two main budget types:

- **Main Budget** — used for budgets of departments that do not have any subordinate departments in the budget hierarchy
- **Sum Budget** — used for budgets of departments that have one or more subordinate departments in the budget hierarchy

Regardless of budget type, the following elements of lines created from a template line cannot be changed:

- Name
- Indentation
- Order
- Income/expense state

These elements cannot be changed because changes would affect automatic aggregation. For example, if the total expense line on one budget is changed to be the sum of the result line, then the values on the superior budget will not make sense. Also, if the names of the lines are changed, then it will be difficult for the employee responsible for a superior budget to compare the lines and values of the superior budget with the lines and values of the subordinate budgets.

## Sum Budget

You may not modify any field on lines of sum budgets, except the Comment fields. The amounts from all subordinate main and sum budgets are automatically aggregated when changed and these sums are displayed on the sum budget.

The employee responsible for a sum budget must approve all subordinate budgets (after they are submitted) before the sum budget can be submitted for approval.

As described above, the amounts on almost all lines on a sum budget are simply sums of all associated lines (the lines created from the same template line as the line on the sum budget) on the main and sum budgets directly below the sum budget in the budget hierarchy. The only lines on sum budgets which are calculated in a different way are the internal and external settlements lines. The calculation of these lines is described in respective sections

## Main Budget

Employees with access to a main budget can specify values on it, either directly on the lines of the budget or on lines of any sub budget of the main budget. Depending on the type of the line only certain fields can be manually changed.

Additional lines can be added, moved, or deleted.

Lines created based on a template have restrictions on which fields can be changed, such as the name, type, indentation, and order of the lines are fixed. However, you can change between the Manual and Calculation line types of some lines using actions described in a separate section.

Sub budgets can be attached to each main budget. Some may be created from the template and others can manually be added, changed, and deleted by the user. Several types have been made for use with these sub budgets, each having a different purpose and meaning. The following sections describe these budget types.

## Employees Sub-Budget

This sub budget is only available if one of the lines of the associated main budget is of type Employee; if not, then it will not be possible to directly budget on employee income or expenses on the main budget. The employees sub budget cannot be created on the budget template but is automatically created on main budgets when these are created from the template.

The employee sub budget contains a line for each employee associated with the department of the main budget. A user can automatically fetch and copy all employees associated with the department into this sub budget and also to create, modify, and delete employees to simulate changes in the headcount of the department. On the budget template, departments and employees are linked using dimensions. Note that any change done to (or deletion of) employees in this sub budget does not change or delete the 'original' employee in Maconomy. All changes only affect the budget employee in the budget module.

The lines on this sub budget are configured in a tree structure, where any root line (a line that has no parent line) is of type Employee, representing a single employee. The Employee line could have a number of subordinate lines of types Sum, Calculation, Manual, or Salary. See section 0 for more information on the different line types.

All subordinate lines of the Employee line on the main budget are automatically copied onto the Employees sub budget for each employee created. So if, for example, the employee line on the main budget has one subordinate line, such as Salary line, then all employees created on the employees sub budget will have one subordinate Salary line.

When a change is made on a line in this sub budget, the corresponding line on the main budget is updated accordingly.

## Direct Costs Sub-Budget

Use this type of sub budget to create lines of type project, project group and direct cost. However, the structure of this sub budget is very strict and the line type of the individual lines is controlled by the application logic, hence, the user cannot set or change the line type manually. When a user creates a line in this sub budget, it is automatically interpreted as a project line. For each direct cost line that exists on the associated main budget, one similar direct cost line is created and attached as a subordinate line to this project line. The pairing of a project line and a number of subordinate direct cost lines can be understood as a building block in this sub budget and cannot be changed, broken, or in any other way, manipulated by the user. Direct cost lines cannot be manually deleted; but when a project is deleted, all the subordinate direct cost lines are deleted as well.

You can create multiple projects on the same direct costs sub budget. Some of these projects can be indented to become subordinates of other projects. When this happens, the parent project is changed into a project group.

The only lines on this sub budget that allow a user to specify amounts in the periods or the total fields are the direct cost lines attached to project lines. The direct cost lines associated with a project group line sum up the associated direct cost lines attached to the projects and project groups that are subordinate to the project group of the direct cost lines. Project lines sum up the attached direct cost lines and project group lines sum up the subordinate project and project group lines.

The Direct Costs sub budget cannot be created on the budget template but is automatically created on main budgets when these are created from the template.

## Settlements Sub-Budget

Use this sub budget to create lines of type sum and settlement. This budget also builds up in a tree structure, but the order and structure do not matter in the way they are summed up on the main budget and any sum budgets above the main budget.

Settlements are summed up on the main budget depending on the budget of the associated main budget and the referenced budget on the settlement lines. All settlements on a main budget are, per definition external settlements, since they represent settlements with other departments. Each settlement on a Settlements sub budget is summed up on the external settlements line (on the main budget) and linked to the specific settlements sub budget, and has the same income/expense setting as the settlement line.

External settlement lines on the sum budgets are summed up using the same concept as the main budgets. An external settlement is a settlement between two departments/main budgets, of which, exactly one of them is somewhere below the sum budget in the budget hierarchy and the other department/budget is not. And again, only the settlements registered on the settlements sub budget referenced from the external settlements line and with the same income/expense setting as the external settlements line are summed up. This means that the external settlements lines do not only sum up settlements created on the associated settlements sub budget, but also settlements registered with other main budgets and against the main budget of the external settlements line.

The internal settlements lines are summed up in almost the same way as external settlements lines, except that it only sums up the lines which are registered by and referring to departments/budgets somewhere below the sum budget in the budget hierarchy.

## Sub Budget

Sub budgets of this type are of the same kind and structure as the main budget. It can contain lines of type Sum, Manual, and Calculation, and any line on this budget can be referred to from a calculation line on either this sub budget or from a line on the main budget. There is no special functionality linked with this type of sub budget.

## Line Types

Different line types can be used across the budget template and budgets. However, only some of the lines are allowed on certain budgets and sub budgets. The following sections describe the purpose and meaning of each line type, what they can be used for by the user, how calculations are done on lines of these types, and how values on lines of these types are aggregated up through the main and sum budgets of the budget hierarchy.

On budget templates and sub budgets of the budget template, line types can be changed until the budgets are created from this template. On sub budgets of main budgets the line type cannot be changed once it has been set and the line has been saved. The only exception to this rule are the manual and calculation lines. Please see related section on how to convert between these two line types.

## Sum Lines

Sum lines exist on almost all budget types, except on the Direct Costs sub budget. Any line of this type simply sums up all lines below the sum line. The user cannot manually update or change sum lines. Whenever a subordinate line is updated, the sum line will automatically be updated, as well as the sum lines on all types of budgets.

## Manual Lines

Lines of this type can be used on all types of budgets, except the Direct Costs and Settlements sub budgets.

Manual lines are lines where a user can manually enter values for the periods or the total.

If values are specified on the periods, the total field is automatically updated by summing up the periods on the line. If the user prefers to only specify the total on the line and have it automatically allocated to the periods, either an allocation key can be specified on the line or the user can manually specify an allocation type and the allocation values to be used on each period. Alternatively, the user can specify to have the total value on a manual line be allocated to the periods on the basis on the allocation of periods on another line. The reference line must be present on either the same budget as the manual line or, if the manual line is on a main budget, to a line on a sub budget (of type sub budget) to the main budget.

On sum budgets, the value of manual lines is the sum of all corresponding lines on the main and sum budgets directly below the sum budget in the budget hierarchy.

## Calculation Lines

As with the manual lines, this line type can be used on all budget types, except the direct costs and settlements budgets.

The calculation line type can be used when the periods of the line should be calculated on the basis on another line. Each calculation line must refer to another line (on which the calculation should be based). Additionally, a surcharge type should be set as well as surcharge values should be specified for all periods. Alternatively, a surcharge key can be specified on the line.

The calculation line must refer to either a line on the same budget as the calculation line or, if the calculation line is on a main budget, to line on a sub budget (of type sub budget) to the main budget.

On sum budgets, the value of calculation lines is the sum of all corresponding lines on the main and sum budgets directly below the sum budget in the budget hierarchy.

## Direct Cost Lines

The direct cost line type can exist on budget templates, main and sum budgets, as well as, on the Direct Costs sub budget; however, it can only be added manually on the budget template. When project or project group lines are created on the direct costs sub budget, a number of direct cost lines are automatically created as well.

Direct cost lines on direct costs sub budgets behave exactly as manual lines. This means that the user can manually specify values on each period or have a total value allocated using an allocation type.

On main budgets, the value of the period and total fields of direct cost lines will be the sum of the corresponding field on the associated direct cost line of all projects created on the direct costs sub budget.

On sum budgets, the value of calculation lines is the sum of all corresponding lines on the main and sum budgets directly below the sum budget in the budget hierarchy.

## Project Lines

The project type can only be used on direct costs sub budgets. The type cannot be manually specified, but the type is automatically specified when the user creates a new line on the Direct Costs sub budget.

Project lines work more or less as sum lines, wherein they simply sum up all direct cost lines attached to the project line.

## Project Group Lines

Project group lines are similar to project lines. They can only exist on direct costs sub budgets but they cannot be manually created. Project line is converted to a project group line when another project or project group line is indented to become a subordinate project or project group. Projects with subordinate projects become project groups.

Just as project lines, project group lines sum up all direct cost lines attached to the project group.

## Settlement Line Type

Settlement line type exists only on the Settlements sub budget.

Each settlement line must have a reference to another department to match settlements across departments/budgets. As registrations can only be made on main budgets, it is only possible to refer to main budgets on a settlement line.

Settlement lines work exactly as manual lines. The user can either specify values for each period or specify a total and have it allocated to the periods using an allocation type, similar to manual lines.

When a settlement line is updated, the relevant internal and external settlements lines (on main and sum budgets) are updated accordingly.

## Internal Settlements Line Type

Internal settlements lines type can only be created on template budgets and can only exist on main and sum budgets.

Each line of this type must refer to a settlements sub budget where it will sum up settlements. For every settlements budget that is referred from a budget, there must exist exactly two internal settlements lines on the budget that refer to the same settlement budget. The two lines should have different income/expense setting.

By definition, an internal settlement is a settlement between two departments in the sub tree of the budget hierarchy that has the current budget as root of the sub tree. And as any main budget only has itself in the sub tree having the main budget as root budget, all settlements registered on the main budget will be external settlements. Hence, the internal settlements lines on main budgets will always be zero.

On sum budgets, each internal settlements line sums up settlement lines satisfying the following criteria:

- The line is registered on a budget below the sum budget in the budget hierarchy.
- The referenced department/budget on the settlement line is also below the sum budget in the budget hierarchy.
- The line has the same income/expense setting as the internal settlements line.
- The line is registered on a settlements sub budget that corresponds to the one referred to from the internal settlements line, that is, created from the same settlements sub budget on the budget template.

## External Settlements Line Type

External settlements lines work in almost exactly the same way as internal settlement lines, except that they sum up the settlement lines that refer to department/budget outside the sub tree in the budget hierarchy of the main or sum budget of the external settlements line.

For this reason, all settlements registered on a settlements sub budget are summed up on the associated external settlements line on the main budget.



On sum budgets, the lines sum up settlements exactly as internal settlements lines except for the difference mentioned above.

## Employee Line Type

Lines of this type can be used on the budget template, main and sum budgets and the employees sub budget. The line type can only be manually specified on the budget template. On the employees sub budget, one employee line is created for each employee that is added to the sub budget.

On the main and sum budgets, only one employee line may be present. This line and all subordinate lines (including their subordinate lines, and so on) will be associated with each employee on the Employees sub budget. On the main budget, all of these lines will contain the summed values of all associated lines on the employees sub budget, regardless of line type.

If there is no employee line on the main budget, then it is not possible to use the employees sub budget from this main budget; thus, the user cannot use and budget on the employees already in Maconomy.

On employees sub budgets, the employee lines contain information regarding the represented employee, such as, monthly salary, employment period, absence, and so on.

On sum budgets, the value of employee lines is the sum of all corresponding lines on the main and sum budgets directly below the sum budget in the budget hierarchy.

## Salary Line Type

Just as with the employee line, salary line can be used on the budget template, main and sum budgets, and on the employees sub budget. The line type can only be manually specified on the budget template.

On main and sum budgets, lines with type Salary can only exist below an employee line, since salary lines should be associated with an employee.

If a salary line is present on a main budget, then it will be present for each employee on the associated employees sub budget. Salary lines on the Employees sub budget is similar to calculation lines; however, it cannot refer to another line (on which the calculations should be based). Instead, calculations are made on the monthly salary specified on the parent employee line. But just as on calculation lines, a surcharge type should be specified on salary lines.

On sum budgets, the value of salary lines is the sum of all corresponding lines on the main and sum budgets directly below the sum budget in the budget hierarchy.

## Revenue Line Type

Revenue lines type can be present on budget templates and main and sum budgets.

Revenue lines behave almost as manual lines; except that the total expected employee income can be automatically updated on a revenue line. When the setting is enabled, the total field is automatically updated and the periods are recalculated (using the mandatory surcharge type/key) when the total expected employee income changes. If absence or a limited employment period has been set on the employee, then this is taken into account when calculating the periods.

On sum budgets, the value of revenue lines is the sum of all corresponding lines on the main and sum budgets directly below the sum budget in the budget hierarchy.

## Type Conversion Line Type

Generally, when a line type is set on a line, it cannot be changed. However, the only exception is that when using actions, manual lines can be converted to calculation lines and vice versa.



If a manual line on a main budget is converted to a calculation line, then a sub budget is created containing two lines – a sum line and a subordinate manual line. The calculation line is set to refer to the sum line and the previous amounts of the calculation line are copied to the manual line on the sub budget. If a manual line on a sub budget is converted, then no additional sub budget is created and the calculation line is not set to refer to any other line.

If a calculation line referring to a line on a sub budget is converted to a manual line and no other line refers to a line on the same sub budget, then the sub budget is deleted.

In both types of conversion, any distribution values are reset but the periodic and total amounts are maintained.

## Distribution Types

Some line types allow for some kind of automatic calculation of the periods given either the total amount or amounts on another line. To make this possible, two distribution types are available – allocation and surcharge. The following sections describe what the distribution type is for, how it is used, and which line types are they applicable.

Distribution keys (allocation or surcharge keys) can be created for each of the distribution types. By doing this, it is much easier for users of budgets to have amounts distributed. On the relevant lines, the key can simply be selected, and the allocation or calculation is done according to the specification of the key. Another advantage is that when a specification of a key is changed, all lines that use this key are updated as well. For instance, if a key specifies how vacation pay should be calculated and the rules are changed, then the key can simply be updated to comply with the new rules and all lines calculating vacation pay are automatically updated as well.

### Allocation Distribution Type

The allocation type can be used on manual, direct cost, settlement, and revenue lines.

The purpose of the allocation type is to allow the user to specify the total amount on a line and then automatically have the amount distributed to the periods given an allocation type and allocation values for each period.

There are two types of allocation, the percentage and share types.

When the percentage type is used, the allocation values for all periods must sum up to 100 and then each period is updated with the associated percentage of the total amount. For example, if the total amount on the line is 300.00 and the allocation value for period 4 is 25, then period 4 will be assigned the amount 75.00.

When the share type is used, there is no requirement of what the allocation values must sum up to. Instead, the total amount is split up into even shares and allocated according to the allocation values. For example, if all allocation values on the line sum up to 120, the total amount is 300.00 and the allocation value on period 6 is 40, then period 6 will be assigned the amount 100.00, as  $40 \times 300.00 / 120 = 100.00$ .

The template enables the user to create allocation keys, which can be used across all budgets and sub budgets created from the template. Each allocation key specifies an allocation type and allocation values for each period. On any line that accepts allocation value, an allocation key can be used; however, the user should not specify an allocation type nor allocation values. When an allocation key is updated through the template, changes are pushed out to all lines using this allocation key.

### Surcharge Distribution Type

The surcharge type can be used on calculation and salary lines. It enables the user to specify a reference line and then automatically have the periods and total calculated, depending on the values on the

reference line. On salary lines however, no reference line is specified since calculations are based on the monthly salary of the associated employee.

There are two surcharge types, the percentage and factor types.

When the percentage type is used, each period is calculated to be the percentage (specified in the surcharge value of the period) of the associated period on the reference line. For example, period 2 on the reference line is 500.00 and the surcharge value for period 2 on the calculation line is 20, then period 2 on the calculation line is assigned the amount 100.00, representing 20% of 500.00. The summed percentage across all surcharge periods need not be 100, as it does for allocations.

When the factor type is used, each period is calculated to be the product of the surcharge value of the same period and the associated period on the reference line. For instance, if period 3 on the reference line is 200.00 and the surcharge value for period 3 is 4.5, then period 3 on the calculation line is set to 900.00, or  $4.5 \times 200.00 = 900.00$ .

Exactly as with allocations, it is possible to create surcharge keys on the template. These keys can then be referred to from calculation and salary lines, without having to specify the surcharge type and values manually. As with the allocation keys, if a surcharge key is updated on the template, then all calculation and salary lines using this surcharge key are updated as well.

## Add-Ons

Add-ons allow you to extend the functionality of the Maconomy platform, using several field types including tabs, checkboxes, dropdown fields, system parameters, and more. This appendix provides information on the add-ons developed for and supported by Maconomy.

### Add-On 106

Add-on 106, Maconomy Portal: Human Resources Management is required by the following Human Resources (HR) dialogs:

- Emergency Contacts
- Education and Qualifications
- Employee Evaluations
- Employee Relations
- Parental Status
- Relocations
- Work Eligibilities
- Company Properties

These dialogs are unavailable if Add-on 106 is not installed.



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