1C:ENTERPRISE 8.2

1C:Subsystems Library Developer's Guide

Powered by 1C:Enterprise 8.2 –
Business Applications Platform

Contents

About This Guide

This guide is intended for developers who write applications for the 1C:Enterprise platform. It describes an example accounting application and provides guidelines for developing similar solutions.

1C:Subsystems Library Overview

1C:Subsystems Library (1C:SL) provides basic functionality demanded in the majority of 1C:Enterprise applications, such as user account management, scheduled job management, or e-mail operations.

1C:SL allows you to develop applications with built-in basic functionality from scratch, as well as quickly add new functionality blocks to your applications. Moreover, using 1C:SL ensures the uniformity of your applications, which makes them easy to deploy and learn.

Subsystems included in 1C:SL cover the following areas:

- Administration of users and access rights
- Service subsystems
- Reference materials and classifiers
- Infobase administration tools
- Multi-purpose technological mechanisms
- Embeddable integrated subsystems

1C:SL is delivered with a demo application (1C:SL Demo), which illustrates the capabilities provided by this library. It is an accounting document flow management system. You can use it as a template for creating document flow management applications, and you can use the "Demo Application Interface" section of this guide as a template for its help.

1C:SL Demo is not a ready-to-use application and cannot be used for actual accounting purposes because the document flow process in this application is greatly simplified. For example, payments from bank accounts are not implemented, and all of the payments are performed in cash.

Demo Application Interface

1C:SL Demo allows managing accounting document flow in multiple companies.

You can create documents in any order that you find convenient and then link them to each other. For example, you can create a customer order and then create a sales invoice linked to the order.

You can also generate customizable reports.

Sections

1C:SL Demo interface is divided into several sections. Each section contains document forms and reports grouped by responsibility area (such as sales or inventory). Some forms and reports belong to several responsibility areas at the same time, and therefore appear in multiple sections.

1C:SL Demo includes the following sections:

- **Sales.** This section is intended for sales managers. It is used for managing sales-related documents.
- **Purchases.** This section is intended for procurement managers. It is used for managing purchase-related documents.
- **Inventory.** This section is intended for warehouse keepers. It is used for managing inventory-related documents.
- **Payroll & HR.** This section is intended for accountants who manage payrolls. It is used for calculating payrolls and managing payroll documents.
- **Finances.** This section is intended for financial officers. It is used for managing receipt and payment documents.
- **Setup and Administration.** This section is intended for 1C:SL Demo administrators. It is used for configuring 1C:SL Demo settings.

Sales

The **Sales** section is intended for sales managers. It is used for managing sales-related documents. It includes the following items:

- **Sales Documents.** Allows you to view the list of sales-related documents, as well as create, edit, and delete them. These documents include customer orders, sales invoices, and petty cash receipts.
- **Counterparties.** Allows you to view the list of counterparties, as well as create, edit, and delete them.
- **Developer’s Guide.** Allows you to view the developer’s guide for 1C:Subsystems Library.
- **Sales**
  - **Customer Orders.** Allows you to view the list of customer orders, as well as create, edit, and delete them.
  - **Sales Invoices.** Allows you to view the list of sales invoices, as well as create, edit, and delete them.
  - **Events.** Allows you to view the list of events (phone calls, appointments, and so on), as well as create, edit, and delete them.

- **See Also**
  - **Event Statuses.** Allows you to view the list of event statuses (planned, completed, and so on), as well as create, edit, and delete them.
  - **Contact Roles.** Allows you to view the list of contact roles (for example, positions of people who are your contacts in other companies), as well as create, edit, and delete them.
- **Create**
  - **Counterparty.** Allows you to create a counterparty.
  - **Customer Order.** Allows you to create a customer order.
  - **Event.** Allows you to create an event (phone call, appointment, and so on).
  - **Sales Invoice.** Allows you to create a sales invoice.
- **Reports**
  - **Additional Reports.** A placeholder for custom reports that application users might request.
- **Tools**
  - **Additional Data Processors.** A placeholder for data processors that application users might request.

Purchases

The **Purchases** section is intended for procurement managers. It is used for managing purchase-related documents. It includes the following items:

- **Purchase Documents.** Allows you to view the list of purchase-related documents, as well as create, edit, and delete them. These documents include purchase invoices and petty cash expenses.
- **Counterparties.** Allows you to view the list of counterparties, as well as create, edit, and delete them.
- **Developer's Guide.** Allows you to view the developer's guide for 1C:Subsystems Library.
- **Purchasing**
  - **Purchase Invoices.** Allows you to view the list of purchase invoices, as well as create, edit, and delete them.
  - **Events.** Allows you to view the list of events (phone calls, appointments, and so on), as well as create, edit, and delete them.
- **See Also**
  - **Event Statuses.** Allows you to view the list of event statuses (planned, completed, and so on), as well as create, edit, and delete them.
  - **Contact Roles.** Allows you to view the list of contact roles (for example, positions of people who are your contacts in other companies), as well as create, edit, and delete them.
- **Create**
  - **Counterparty.** Allows you to create a counterparty.

    - **Event.** Allows you to create an event (phone call, appointment, and so on).
    - **Purchase Invoice.** Allows you to create a purchase invoice.
- **Reports**
    - **Additional Reports.** A placeholder for custom reports that application users might request.
- **Tools**
    - **Additional Data Processors.** A placeholder for data processors that application users might request.

Inventory

The **Inventory** section is intended for warehouse keepers. It is used for managing inventory-related documents. It includes the following items:

- **Inventory Documents.** Allows you to view the list of inventory-related documents, as well as create, edit, and delete them. These documents include purchase invoices and sales invoices.
- **Items.** Allows you to view the list of items that can be purchased or sold, as well as create, edit, and delete them.
- **Developer’s Guide.** Allows you to view the developer’s guide for 1C:Subsystems Library.
- **Inventory**
    - **Purchase Invoices.** Allows you to view the list of purchase invoices, as well as create, edit, and delete them.
    - **Sales Invoices.** Allows you to view the list of sales invoices, as well as create, edit, and delete them.
- **See Also**
    - **Units of Measure.** Allows you to view the list of measurement units available for use in documents, as well as create, edit, and delete them.
- **Create**
    - **Item.** Allows you to create an item that can be purchased or sold.
    - **Purchase Invoice.** Allows you to create a purchase invoice.
- **Reports**
    - **Additional Reports.** A placeholder for custom reports that application users might request.
    - **Inventory.** Allows you to view the inventory report.
- **Tools**
    - **Additional Data Processors.** A placeholder for data processors that application users might request.

Payroll & HR

The **Payroll & HR** section is intended for accountants who manage payrolls. It is used for calculating payrolls and managing payroll documents. It includes the following items:

- **Payroll Documents.** Allows you to view the list of payroll-related documents, as well as create, edit, and delete them. These documents include payroll calculations, payroll sheets, and time sheets.
- **Employees.** Allows you to view the list of employees from all managed companies, as well as create, edit, and delete them.
- **Developer's Guide.** Allows you to view the developer's guide for 1C:Subsystems Library.
- **Human Resources**
  - **Employee Positions and Pay Rates.** Allows you to view the list of employee payment rates, as well as create, edit, and delete them.
- **Salary**
  - **Time Sheets**. Allows you to view employee time sheets, as well as create, edit, and delete them.
  - **Payroll Calculation**. Allows you to view the list of payroll calculations, as well as create, edit, and delete them.
  - **Payroll Sheets**. Allows you to view the list of employee payroll sheets, as well as create, edit, and delete them.
- **See Also**
  - **Positions.** Allows you to view the list of employee positions for all managed companies.
  - **Individuals.** Allows you to view the list of all people registered in the application (employees, counterparty representatives, former employees, and so on), as well as create, edit, and delete them.
  - **Identity Document Kinds.** Allows you to view the list of identity document types that individuals might have (passport, driving license, and so on), as well as create, edit, and delete them.
  - **Payment and Deduction Kinds.** Allows you to view the list of payment and deduction kinds for payroll calculations, as well as create, edit, and delete them.
  - **Calculation Parameters.** Allows you to view the list of parameters used in payroll calculation and specify their calculation formulas, as well as create and delete them.
  - **Work Time Types.** Allows you to view the list of time types used for payroll calculation (regular work time, overtime, sick leaves, and so on), as well as create, edit, and delete them.
- **Create**
  - **Employee.** Allows you to create an employee.
  - **Payroll Sheet.** Allows you to create a payroll sheet.

- **Reports**
  - **Additional Reports.** A placeholder for custom reports that application users might request.
  - **Human Resources Accounting.** Allows you to view the report on employee payments.
  - **Time Worked.** Allows you to view the report on employee total work time.
- **Tools**
  - **Additional Data Processors.** A placeholder for data processors that application users might request.

Finances

The **Finances** section is intended for financial officers. It is used for managing receipt and payment documents. It includes the following items:

- **Cash Documents.** Allows you to view the list of petty cash expenses and receipts, as well as create, edit, and delete them.
- **Chart of Accounts.** Allows you to view the list of accounts, as well as create, edit, and delete them.
- **Developer's Guide.** Allows you to view the developer's guide for 1C:Subsystems Library.
- **Bank**
  - **Banks.** Allows you to view the list of banks that your company and its counterparties use, as well as create, edit, and delete them.
  - **Currencies.** Allows you to view the list of available currencies, as well as create, edit, and delete them.
- **Petty Cash**
  - **Payroll Sheets**. Allows you to view the list of employee payroll sheets, as well as create, edit, and delete them.
  - **Petty Cash Expenses**. Allows you to view the list of petty cash expenses, as well as create, edit, and delete them.
  - **Petty Cash Receipts**. Allows you to view the list of petty cash receipts, as well as create, edit, and delete them.
- **Reports**
  - **Additional Reports.** A placeholder for custom reports that application users might request.
  - **Cash Assets.** Allows you to view the report on petty cashes.
- **Tools**
  - **Additional Data Processors.** A placeholder for data processors that application users might request.
- **Financial Reports**
  - **Balance Sheet.** Allows you to view the balance sheet.

Setup and Administration

The **Setup and Administration** section is intended for 1C:SL Demo administrators. It is used for configuring 1C:SL Demo settings. It includes the following items:

- **Users.** Allows you to view the list of application users with their roles and authentication methods, as well as create, edit, and delete them.
- **External Users.** Allows you to view the list of external users with their roles and authentication methods, as well as create, edit, and delete them.
- **Event Log.** Allows you to view the customizable event log (all of the actions performed in the application, including user actions and scheduled jobs).
- **Files by Folders.** Allows you to view available files (divided into custom folders), as well as create, edit, and delete them.
- **Locked Files.** Allows you to view files that you can edit, as well as edit them.
- **Developer's Guide.** Allows you to view the developer's guide for 1C:Subsystems Library.
- **Contact Information Kinds.** Allows you to specify which contact information (address, phone, and so on) is present in each form.
- **Additional Data and Attributes.** Allows you to add fields to forms and predefine available values for these fields.
- **Object Versioning Settings.** Allows you to enable or disable version history for some document and catalog types.
- **Additional Reports and Data Processors.** Allows you to view additional reports and data processors, as well as add, edit, or delete them.
- **Scheduled and Background Jobs.** Allows you to view scheduled jobs and their history, as well as start, stop, and schedule them.
- **Printed Form Templates.** Allows you to view print templates for various document types, as well as edit or delete templates.
- **See Also**
  - **Calendars.** Allows you to view calendars with work days and holidays, as well as create, edit, and delete them.
  - **Active Users.** Allows you to view the list of users that are working with the infobase, as well as terminate their sessions.
  - **E-mail Accounts.** Allows you to specify e-mail account settings that the application uses for sending and receiving e-mails.
  - **All Files.** Allows you to view available files, as well as edit and delete them.
- **Reports**
  - **Event Log Monitor.** Allows you to view filtered event log, as well as schedule sending this log by e-mail.
  - **Additional Reports.** A placeholder for custom reports that application users might request.

- **Tools**
  - **File Contents Indexing.** Allows you to specify the period for indexing text documents stored in the application for the full-text search, as well as run forced indexing.
  - **Infobase Connection Blocking.** Allows you to allow or deny new connections to the infobase.
  - **Additional Data Processors.** A placeholder for data processors that application users might request.
  - **Update Details.** Allows you to view release notes for installed updates.
  - **Delete Marked Objects.** Allows you to attempt deletion of objects that are marked for deletion. Objects that have references to them from other objects cannot be deleted.
  - **Form Settings Management.** Allows you to reset your custom form settings, as well as copy these settings to other user profiles.
- **Parameters Setting**
  - **Accounting Settings.** Allows you to specify settings that are applied to the entire document flow.
  - **Personal Settings.** Allows you to specify your personal preferences.
  - **Service Function Settings.** Allows you to specify settings that are applied to the entire infobase.

Forms

Active Users

The **Active Users** form allows you to view the list of users that are working with the infobase, as well as terminate their sessions. Terminating sessions is only available if the application is running in the client/server mode.

By default, users cannot terminate sessions. To be able to perform this action, on the **All actions** menu, click **Infobase Administration Parameters**, specify your user name and password, and then click **Write**.

For each user, the following information is available:

- **User name.** The user name for logging on to the application.
- **Client.** The client for connecting to the infobase.
- **Session started at.** The start time of the user session.
- **Computer.** The computer name.
- **Session number.** The session number.

To view the detailed list of user actions, right-click the user, and then click **Event Log**.

To terminate a session, right-click the user, and then click **Terminate Session**.

Accounting Settings

The **Accounting Settings** form allows you to specify settings that are applied to the entire document flow.

It contains the following tabs:

- **Companies**
- **Field Positions**
- **Opening Balances**

The **Companies** tab contains the following settings:

- **Use multiple companies.** If this check box is selected, the application allows accounting for multiple companies. All data are stored in a single database, allowing generation of consolidated reports that include data from multiples companies.

  If this check box is not selected, the application only allows accounting for a single company.

- **View and edit list of companies.** Opens the **Companies** form where you can add, edit, or delete companies (see page 21).

  This option is only available if the **Use multiple companies** check box is selected.

- **View and edit company details.** Opens the **Company** form where you can edit company information (see page 21).

  This option is only available if the **Use multiple companies** check box is not selected.

- **Default company.** The default company. When you create a document, the default company name is automatically added to the **Company** box.

  Each application user can override this setting by specifying their default company in their personal settings (in the left pane of the **User** form, click **User settings** and then, in the **Main company** box, specify the company).

- **Principal currency.** The principal currency (the currency used for company accounts and transactions unless specified otherwise). It is the same for all companies.

- **Use other currencies.** If this check box is selected, you can change currency in all of the documents.

  If this check box is not selected, you cannot change currency in documents, and therefore the principal currency is always used.

- **View and edit the list of petty cashes.** Opens the **Petty Caches** form where you can edit the list of petty cashes for the company that is selected in the **Default company** box.

The **Field Positions** tab contains the following settings:

- **Position of planned shipment date in Customer Order form.** Available options include:
  - **Top (a single shipment date for all items)** – the **Customer Order** form includes a single shipment date for all of the listed items.
  - **Table rows (individual shipment date for each item)** – the **Customer Order** form includes an individual shipment date for each listed item.

- **Position of customer order in Sales Invoice and Purchase Invoice forms.** Available options include:
  - **Top (a single customer order for all items)** – the **Purchase Invoice** and **Sales Invoice** forms include a single customer order for all of the listed items.
  - **Table rows (individual customer order for each item)** – the **Purchase Invoice** and **Sales Invoice** forms include an individual customer order for each listed item.

The **Opening Balances** tab contains the **Opening Balances** form, which allows you to add, edit, and delete opening balances.

For each opening balance, the following information is available:

- **Date.** The date when the opening balance was entered.
- **Number.** The opening balance number.
- **Company.** The company where the opening balance belongs.
- **Accounting section.** The accounting section where the opening balance belongs:
  - **Inventory.** The inventory balances.
  - **Cash assets.** The petty cash balances.
  - **Salary statement**. The payroll balances.

Additional Data and Attributes

The **Additional Data and Attributes** form allows you to add fields to forms and predefine available values for these fields.

The **Additional Data and Attributes** form is only available if you select the **Use additional data and attributes** check box in the **Service Function Settings** form (see page 41).

For each set of additional properties and attributes, the following information is displayed:

- **Set of properties.** The form where the attributes belong.
- **Additional attributes.** The list of attributes displayed on the **Additional Attributes** pane or tab.
- **Additional data.** The list of attributes displayed by clicking the **Additional Data** button. 

Additional Reports and Data Processors

The **Additional Reports and Data Processors** form allows you to view additional reports and data processors, as well as add, edit, or delete them.

Each additional report or data processor is stored in a single file. These files have the following extensions:

- .erf for additional reports
- .epf for additional data processors

A report or data processor can be added to the application as a button or a menu item. The interface element that starts the report or data processor is specified when you add the report or data processor to the application.

To add a report or data processor, click **Create**, select an .erf or .epf file, and click **Open**. Then specify the report or data processor settings. The following settings are available:

- **Group.** The report or data processor group. You can create a new group or select from the list of available ones.

  This group is only used for navigation through the list of reports or data processors; it does not affect the position of the report or data processor in the application interface.
- **Description.** The report or data processor name.
- **Availability.** Shows whether the report or data processor is added to the application interface. Select one of the following values:
  - **Enabled.** The report or data processor is added to the application interface. If the report or data processor is designed to run from forms, it is visible to all users that have access to these forms. If the report or data processor is designed to run from a menu, it is visible to users specified in the **Users that can run the command** list.
  - **Disabled.** The report or data processor is not added to the application interface.
  - **Enabled for administrators only.** The report or data processor is added to the application interface only for users that have **Full access** or **Adding and changing additional data processors** roles.
- **Responsible.** The user who added the report or data processor.
- **Data processor assignments.** The forms where the report or data processor button is available. This option is only available if the report or data processor is designed to run from forms.
- **Use in list forms.** If this check box is selected, the interface element that starts the report or data processor is added to the form with the list of objects that it affects. This option is only available if the report or data processor is designed to run from forms.
- **Use in object forms.** If this check box is selected, the interface element that starts the report or data processor is added to the form of the object that it affects. This option is only available if the report or data processor is designed to run from forms.
- **Specify sections of command interface.** The menu items where the report or data processor is located. Available menu items are defined in the report or data processor script. Select the check boxes next to the menu items you want to use.

  Selecting **Default List** for a report adds it to the **Additional Reports** menu item. Selecting **Default List** for a data processor adds it to the **Additional Data Processors** menu item.

  This option is only available if the report or data processor is designed to run from a menu.
- **Users that can run the command.** Allows you to specify users who have access to the command selected in the table below. Only users listed here can see the button or menu item that calls the command. This option is only available if the report or data processor is designed to run from a menu.

- **Schedule.** Allows you to specify schedule for the command selected in the table below. It is only applicable to server method commands. This option is only available if the report or data processor is designed to run from a menu.
- **Commands.** Commands available for your report or data processor. To learn about these commands, consult the report or data processor author.
- **Comment.** Your comment to the data processor.

To update a report or data processor, obtain a new .erf or .epf file. Then, in the **Additional Reports and Data Processors** form, click **Load File**, select the file, and click **Open**.

To export a report or data processor to a file, click **Unload File**, specify the file name and path, and then click **Save**. This only saves the report or data processor itself; it does not save the settings specified in this form.

All Files

The **All Files** form allows you to view available files, as well as edit and delete them. This includes files that are attached to objects.

To view a file, double-click it.

To open the file card, select the file and click the button. The following information is available in the top part of the file card:

- **File name.** The file name.
- **Description.** The file description.

The **Main** tab contains file attributes and file versioning preferences. You can edit some of them.

The following actions are available on the file card:

- **View.** Open the file in the default program for this file type.
- **Lock and Edit.** Lock the file for editing, and then open the file in the default program for this file type.
- **Save and Unlock.** Save the file in the application file storage and unlock the file.
- **Save.** Save the file in the application file storage and keep the file locked for editing.
- **Open Local Folder.** Open the folder where the local file copy is located.
- **Save As.** Save the file copy on a different drive, in a different folder, or under a different name.

Banks

The **Banks** form allows you to view the list of banks that your company and its counterparties use, as well as create, edit, and delete them.

For each bank, the following information is available:

- **Group.** The bank group. It is recommended that you group banks by regions.
- **Name.** The bank name.
- **Correspondent account.** The bank correspondent account.

- **BIN.** The bank identification number.
- **City**, **Address**, and **Phones.** The bank contact information.

Calculation Parameters

The **Calculation Parameters** form allows you to view the list of parameters used in payroll calculation and specify their calculation formulas, as well as create and delete them.

You can choose one of the following parameter calculation methods.

Method	Description	How to use
Use a constant	The parameter is a constant.	Select the **Specify value in payroll calculation document** check box. When you fill the **Payroll Calculation** form, specify the parameter value there. For more information, see section "Payroll Calculation" on page 33.
Use a query	The parameter is defined in a query. This method allows you to perform complex calculations.	Clear the **Specify value in payroll calculation document** check box and select the **Use custom query** check box. On the **Query** tab, write a query.
Use a filter	The parameter is defined in a query. Instead of writing the query manually, you select a data source and specify a filter. This method is much easier than writing the query manually, but it does not allow you to perform complex calculations.	Clear the **Specify value in payroll calculation document** and **Use custom query** check boxes. In the **Source** box, select data source. On **Data** and **Filter** tabs, specify the filter options. The query is generated automatically. It is displayed on the **Query** tab. You cannot edit the query directly; you can only edit the filter options.
Use a template	Use one of the predefined calculation templates. Each of them is either a query or a filter that you can edit.	Click the **Use Template** button and select a template. This adds either a filter or a query that you can edit.

When you select a method, the form items that are not relevant to it are hidden.

For each calculation parameter, the following information is available:

- **Description.** The parameter name as it appears in the list.

- **Code**. The parameter code that is assigned automatically.
- **Identifier.** The parameter name that is used in payroll calculation formulas.
- **Details.** Your comment to the calculation parameter.
- **Source.** The data source that you want to use for creating a filter.
- **Specify value in payroll calculation document.** If this check box is selected, you have to specify a constant parameter value in the **Payroll Calculation** form.

  If this check box is not selected, you have to specify the rules for calculating the parameter value in this form.
- **Use custom query.** If this check box is selected, you can enter a query for calculating the parameter value on the **Query** tab.

  If this check box is not selected, you can create a query for calculating the parameter using a filter. The data source is specified in the **Source** box, and the filter is specified on the **Data** and **Filter** tabs.
- **Data** tab. In the upper pane, specify the time period. Only data belonging to the specified time period will be used in the filter.

  In the lower pane, select the field whose values you want to summarize for calculating the parameter.

  If the tab contains no entries, select the data source in the **Source** box.
- **Filter** tab. Specify the filter that you want to apply to data selected on the **Data** tab. If you use multiple filter conditions, they are connected with AND operators.
- **Query** tab. Specify the query that you want to use. If you choose to calculate the parameter using a filter, this tab contains an auto generated query, which is read-only.

Calendars

The **Calendars** form allows you to view calendars with work days and holidays, as well as create, edit, and delete them.

To open a calendar, double-click it.

Work days are displayed in black, while holidays are displayed in red.

When you create a calendar, all of its days are marked as holidays. You have the following options for specifying work days:

- To toggle between a work day and a holiday, double-click a calendar day.
- To mark weekdays as work days, and weekends and holidays as non-work days, click **Reset**.
- To copy all of the work days and holidays from another calendar, click **Copy Calendar**, and then select a calendar.

Cash Documents

The **Cash Documents** form allows you to view the entire list of petty cash expenses and receipts, as well as create, edit, and delete them.

The top part of the form contains filter options that you can apply to the list.

For information about editing cash documents, see:

- Petty Cash Expenses on page 36
- Petty Cash Receipts on page 36

Chart of Accounts

The **Chart of Accounts** form allows you to view the list of accounts, as well as create, edit, and delete them.

For each account, the following information is available:

- **Code.** The account number.
- **Subordinate to account.** The parent account. If this account has no parent account, leave the box empty.
- **Type.** The account type: active, passive, or active/passive.
- **Priority.** The value that defines default account sorting order. Account with the lowest order goes first; account with the highest order goes last.
- **Account name.** The account name as it is displayed in the account list.
- **Account group.** The account type, which is selected from the list of predefined types.
- **Allow nonprincipal currencies.** If this check box is selected, the account can contain entries on transactions in nonprincipal currencies.

Companies

The **Companies** form allows you to create, edit, and delete companies.

For each company, the following information is available:

- **Name.** The company name as it appears in the list.
- **Prefix.** The prefix to document number and catalog codes for this company. It is required to ensure that all of the document numbers and catalog codes are unique.
- **Code.** The company code that is assigned automatically.

The following information is available on the **Common** tab:

- **Printed Name.** The company full name, which is used in printed documents.
- **Default Calendar.** The default calendar for this company.
- **Business** or **Individual.** Shows whether the company is a business or an individual.
- **TIN.** The taxpayer identification number.
- **Default bank account.** The default bank account for the company. When you select the company in a document, the account specified here automatically goes to the bank account field.
- **Default petty cash.** The default petty cash for the company. When you select the company in a document, the petty cash specified here automatically goes to the petty cash field.
- **BTRC#.** The business tax registration certificate.
- **Issue date.** The issue date of the business tax registration certificate.

The **Addresses and Phones** tab contains the company contact info.

Contact Information Kinds

The **Contact Information Kinds** form allows you to specify which contact information (address, phone, and so on) is present in each form.

The **Contact Information Kinds** form contains the list of contact information fields available in each form. You can add or remove these fields, change their positions, and change filling options for these fields.

For each contact information field, the following information is available:

- **Form.** The object type that uses this kind of contact information. In the user interface, fields belonging to the same group are located on the same tab.
- **Description.** The field name, as it appears in the form.
- **Information type.** The type of data stored in this field (address, phone, e-mail, and so on).
- **Always edit in dialog box.** If this check box is selected, the field can only be edited in a dialog box.

  If this check box is cleared, this field can be edited by typing a new value in it.
- **Always use address classifier.** If this check box is selected, some address parts cannot be typed; they must be selected from the predefined address list. This check box is only available for fields of "address" type.

You can change the order of contact information fields in the user interface by selecting them and then clicking arrows on the command bar.

Contact Roles

The **Contact Roles** form allows you to view the list of contact roles (for example, positions of people who are your contacts in other companies), as well as create, edit, and delete them.

For each contact person role, the following information is available:

- **Role.** The role name as it appears in the list.
- **Code.** The role code that is assigned automatically.
- **Description.** Your comments to the role.

Counterparties

The **Counterparties** form allows you to view the list of counterparties, as well as create, edit, and delete them.

For each counterparty, the following information is available:

- **Name.** The counterparty name as it appears in the list.
- **Code.** The counterparty code that is assigned automatically.
- **Parent group.** The counterparty group (customers, vendors, and so on). You can create a new group or select from the list of available ones.
- **Business** or **Individual.** Shows whether the counterparty is a business or an individual.

- **Printed name.** The counterparty full name, which is used in printed documents.

The **Common** tab of the **Counterparty** form contains the following settings:

- **Common.** The counterparty name, which is selected from the **Individuals** list. This box is only available if the counterparty is an individual.
- **TIN.** The Taxpayer Identification Number.
- **Default bank account.** The default bank account for the counterparty. When you select the counterparty in a document, the account specified here automatically goes to the bank account field.
- **Default agreement.** The default agreement for the counterparty. When you select the counterparty in a document, the agreement specified here automatically goes to the agreement field.
- **Customer receivables account.** The customer receivables account. It is only applicable if the counterparty is a customer.
- **Vendor payables account.** The vendor payables account. It is only applicable if the counterparty is a vendor.

The **Addresses and Phones** tab of the **Counterparty** form contains counterparty contact information.

The **Comments** tab of the **Counterparty** form contains additional information about the counterparty.

Currencies

The **Currencies** form allows you to view the list of available currencies, as well as create, edit, and delete them.

For each currency, the following information is available:

- **Currency name.** The currency name
- **Alphabetic code.** The alphabetic currency code. It is recommended that you use codes from ISO 4217.
- **Numeric code.** The numeric currency code. It is recommended that you use codes from ISO 4217.
- **Download exchange rates from the Internet.** If this check box is selected, the application automatically downloads the currency exchange rate at 12:00 PM from a web site that offers financial statistics.
- **Currency exchange rate depends on another currency rate.** If this check box is selected, the currency exchange rate is calculated based on another currency exchange rate.

  This check box is only available if the **Download rates from the Internet** check box is not selected.
- **Base currency.** The currency whose exchange rate is used for calculating this currency exchange rate.

  This box is only available if the **Currency exchange rate depends on another currency rate** check box is selected.

- **Percentage difference between this currency exchange rate and base currency exchange rate**. The percentage difference between this currency exchange rate and base currency exchange rate. The following formula is used for calculating this currency exchange rate:

  this_currency_exchange_rate = *base_currency_exchange_rate* * (100 + *percentage_difference*) / 100

Customer Orders

The **Customer Order** form allows you to view the list of customer orders, as well as create, edit, and delete them.

For each customer order, the following information is available:

- **Number.** The customer order number.
- **Date.** The customer order date.
- **Counterparty.** The customer company.
- **Company.** Your company (the company that received the order).
- **Agreement.** The agreement with the customer, which allows them to issue the customer order.
- **Closed.** The customer order state, open or closed.
- **Currency.** The currency that will be used to pay for the ordered items.
- **Shipping date.** The shipping date for all of the ordered items.

  The shipping date can be displayed either here (a single date for all items) or in the list of items (an individual date for each item). This depends on the settings that you specify in the **Accounting Settings** form, on the **Field Positions** tab (see page 14).
- **Comment.** Your comment to the order.
- **Total amount.** The total price of all ordered items.

The following information is available for each item on the **Goods and Services** tab:

- **Item.** The item name.
- **Quantity.** The item quantity.
- **UOM.** The unit of measure for this item.
- **Price.** The item price, discounts not included.
- **Discount rate.** Total discount rate.
- **Amount.** The total price, discounts included.
- **Shipping date.** The item shipping date.

  The shipping date can be displayed either here (an individual date for each item) or at the top part of the form (a single date for all items). This depends on the settings that you specify in the **Accounting Settings** form, on the **Field Positions** tab (see page 14).

The following information is available on the **Additional Attributes** tab:

- **Responsible.** The employee responsible for this order.

Delete Marked Objects

The **Delete Marked Objects** form allows you to attempt deletion of objects that are marked for deletion. Objects that have references to them from other objects cannot be deleted.

Only users that have administrative rights can delete objects marked for deletion.

The deletion is permanent; there is no way to restore deleted objects.

You have the following options for object deletion:

- **Delete all marked objects.** Delete all of the objects marked for deletion that have no references to them from other objects.
- **Select objects to be deleted.** Select objects to be deleted, and then delete all of the selected objects that have no references to them from other objects.

After the operation is complete, the list of objects that were not deleted is displayed, together with their reference tree. Objects that cannot be deleted because other objects refer to them are marked with red check marks; objects that can be deleted are marked with green check marks.

E-mail Accounts

The **E-mail Accounts** form allows you to specify e-mail account settings that the application uses for sending and receiving e-mails.

For each e-mail account, the following information is available:

- **Description.** The account name as it appears in the list.
- **Name.** The user name as it appears in the **From** field in e-mails.
- **E-mail address.** The e-mail address. For example, info@1c.ru.
- **User name.** The user name for logging on to the mailbox.
- **Password.** The password for logging on to the mailbox.
- **Remember password.** If this check box is selected, you do not have to enter the password every time the application attempts to send or receive e-mail.
- **Incoming e-mail server (POP3).** The POP3 server.
- **Outgoing e-mail server (SMTP).** The SMTP server.
- **Additional settings server e-mail.** Opens advanced e-mail account settings.
- **Sending.** If this check box is selected, the application can use the account for sending e-mails.
- **Receiving.** If this check box is selected, the application can use the account for receiving e-mails.
- **Responsible.** The e-mail account owner.

To check the connection to the mailbox, click **Check E-mail Account**.

Employee Positions and Pay Rates

The **Employee Positions and Pay Rates** form allows you to view the list of employee payment rates, as well as create, edit, and delete them.

For each payment rate, the following information is available:

- **Start date.** The date when the employee took up the position.

  The employee is considered to hold the position from the date specified here till the date when the employee takes up another position or leaves the company (if no such records are available, the employee is considered to be still holding the position).
- **Company.** The company where the employee works.
- **Employee.** The employee name.
- **Payment or deduction kind.** The payment or deduction kind. The payment periods (daily, monthly, and so on) are specified in these kinds.
- **Position.** The employee position.
- **Currency.** The currency used for payments.
- **Expenses account.** The account for this payment.
- **Amount.** The money paid or deducted during the payment period (daily, monthly, and so on). The payment periods are specified in the payment or deduction kind.

Employees

The **Employees** form allows you to view the list of employees from all managed companies, as well as create, edit, and delete them.

An employee is an individual that occupies a specific position. An individual might have multiple employee entries, which include all of their current and previous positions.

The company and position of the employee are specified in the Employee Positions and Pay Rates form (see page 25).

When you edit an employee, the following information is available:

- **Parent group.** The employee group. You can select from available groups or create a new one.
- **Employee #.** The employee number, unique within a company. It is assigned automatically.
- **Description.** The employee name as it appears in the list.
- **Payroll account.** The employee payroll account.
- **Individual.** The entry that represents this person in the list of individuals.

When you create an employee, the following options are available in the top part of the form:

- **Create both an employee and an individual.** Create both an individual and an employee linked to the individual.
- **Create employee based on an individual.** Create an employee and link them to an existing individual.
- **Individual.** The entry that represents this person in the list of individuals. This option is only available is you select the **Create employee based on an individual** option.

- **Parent group.** The employee group. You can select from available groups or create a new one.
- **Employee #.** The employee number, unique within a company. It is assigned automatically.
- **Description.** The employee name as it appears in the list.

When you create an employee, the following options are available on the **Main** tab:

- **Payroll account.** The employee payroll account.

The **Personal Data** tab contains the settings for creating an individual linked to the employee. This tab is only available if you select the **Create both an employee and an individual** check box.

When you create an employee, the following options are available on the **Recruitment Information** tab:

- **Hire date.** The employee's reception date.
- **Position.** The employee's position.
- **Company.** The employee's company.
- **Payment or deduction kind**, **Amount**, **Currency**, **Expenses Account**. The default payment rate settings. You can add more payment rates later using the **Employee Positions and Pay Rates** form (see page 25).

Event Log

The **Event Log** form allows you to view the customizable event log (all of the actions performed in the application, including user actions and scheduled jobs).

The number of stored log entries is specified by the application administrator.

You can specify the number of latest log entries displayed in the **Number of events displayed** box. To view earlier entries, filter the log by time.

Events

The **Events** form allows you to view the list of events (phone calls, appointments, and so on), as well as create, edit, and delete them.

For each event, the following information is available:

- **Number.** The event number that is assigned automatically.
- **Date.** The event date.
- **Incoming** or **Outgoing.** Shows who initiated the event: a counterparty (incoming) or your company (outgoing).
- **Basis.** The document that the event is based on.
- **Type.** The event type (phone call, appointment, and so on).
- **Status.** The event status, which is selected from the list of statuses. For more information, see section "Event Statuses" on page 28.
- **Subject.** The event subject, as it is shown in the list of events.
- **Description.** The detailed information about the event.
- **Counterparty.** The counterparty involved in the event.
- **Contact persons.** The list of contacts related to the event.

- **Begins.** The event start time.
- **Ends.** The event end time.
- **Responsible.** The employee that is responsible for the event or for its follow-ups.

Event Statuses

The **Event Statuses** form allows you to view the list of event statuses (planned, completed, and so on), as well as create, edit, and delete them.

For each event status, the following information is available:

- **Description.** The status name as it appears in the list.
- **Code.** The event status code that is assigned automatically.
- **Details.** The status description.

External Users

The **External Users** form allows you to view the list of external users with their roles and authentication methods, as well as create, edit, and delete them.

The **External Users** form is only available if you select the **Use external users** check box in the **Service Function Settings** form (see page 41).

External users are users that are linked to infobase objects (customer or vendor companies). This user type is recommended for customer or vendor company representatives. They usually have limited access to the infobase, compared to regular users.

For each external user, the following information is available:

- **Infobase user.** The linked infobase object (a customer or a vendor company).
- **Allow access to infobase.** If this check box is selected, the user can log on to the application.
- **User name.** The user name for logging on to the application.
- **Password.** The password for logging on to the application.
- **Password confirmation.** The password confirmation. Enter the same password as you entered in the **Password** box.
- **User cannot change password.** If this check box is selected, the user cannot change their password.
- **Interface language.** The application language for this user.
- **Set roles explicitly.** If this check box is selected, the user access rights are specified in the **Roles** list.

  If this check box is not selected, the user access rights are predefined in the application script and cannot be changed in this form.
- **Roles.** Select the actions that the user is allowed to perform.

File Contents Indexing

The **File Contents Indexing** form allows you to specify the period for indexing text documents stored in the application for the full-text search, as well as run forced indexing. Note that full-text search does not work for encrypted files.

The **File Contents Indexing** form is only available if you select the **Use full-text search** check box in the **Service Function Settings** form (see page 41).

The form contains the following settings:

- **Indexing period.** The period for indexing text documents.
- **Run Now.** Run forced indexing.

Files by Folders

The **Files by Folders** form allows you to view available files (divided into custom folders), as well as create, edit, and delete them. This does not include files that are attached to objects. The folders are the same for all application users.

To create a folder, click , specify the folder details, and then click **Write and Close**.

To create a file, click **Create**, select one of the following options, select a file, and then click **Create**:

- **Copy file from the infobase to use it as a template.** Copies a file stored in the infobase; you can edit it after copying.
- **Load file from the hard disk.** Adds a file from your hard disk to the infobase.

To open a file, double-click it. If the **Prompt to choose between viewing and editing on double-clicking a file** check box in the **Personal Settings** form is selected, you are offered to choose whether you want to preview or edit the file. If you choose to edit the file, it becomes locked for editing (other users cannot edit it until you unlock the file).

To lock the file for editing and then open it in the default program for this file type, select the file and click **Lock and Edit**.

To save the file in the application file storage and unlock the file, select the file and click **Save and Unlock**.

To open the file card, select the file and click the button. The following information is available in the top part the file card:

- **File name.** The file name.
- **Details.** The file description.

The **Main** tab contains file attributes and file versioning preferences. You can edit some of them.

The following actions are available on the file card:

- **View.** Open the file in the default program for this file type.
- **Lock and Edit.** Lock the file for editing, and then open the file in the default program for this file type.
- **Save and Unlock.** Save the file in the application file storage and unlock the file.
- **Save.** Save the file in the application file storage and keep the file locked for editing.
- **Open Local Folder.** Open the folder where the local file copy is located.
- **Save As.** Save the file copy on a different drive, in a different folder, or under a different name.

To view the list of files without folders, click the **Show or hide folders** button.

Form Settings Management

The **Form Settings Management** allows you to reset your custom form settings, as well as copy these settings to other user profiles. This form lists all of the forms that have been changed.

To reset all of the form settings:

- Select the forms whose settings you want to reset by clicking them while holding down CTRL, and then click **Delete Settings**.

To copy the settings to other user profiles:

- Select the forms whose settings you want to copy by clicking them while holding down CTRL, click **Copy to Users**, select users, and then click **OK**.

Individuals

The **Individuals** form allows you to view the list of all people registered in the application (employees, counterparty representatives, former employees, and so on), as well as create, edit, and delete them.

For each individual, the following information is available:

- **Full name.** The full name.
- **Code**. The individual code that is assigned automatically.
- **Group.** The group where the individual belongs. You can select from available groups or create a new one.
- **Birth date.** The birth date.
- **Gender.** The gender.
- **Addresses and Phones.** The contact info.

Identity Document Kinds

The **Identity Document Kinds** form allows you to view the list of identity document types that individuals might have (passport, driving license, and so on), as well as create, edit, and delete them.

For each document type, the following information is available:

- **Description.** The document type.

Infobase Connection Blocking

The **Infobase Connection Blocking** form allows you to allow or deny new connections to the infobase. Only users that have administrative rights can allow or deny new connections.

You have the following options:

- **Active Users.** View the list of users connected to the infobase. In this list, you have the option to close their connections.
- **Block new connections.** If this check box is selected, all new connection attempts made within the specified period are denied.
- **Start blocking at.** The start of the period when all connection attempts are denied.

- **End blocking at.** The end of the period when all connection attempts are denied.
- **Message to users whose connection attempts are denied.** The message that is displayed to users whose connection attempts are denied.
- **Access code.** The code that allows connection during the blocking period. To use the code, a user must run the application from the command line in the following format: 1cv8.exe /UC<*code*>.

Inventory Documents

The **Inventory Documents** form allows you to view the list of purchase invoices and sales invoices, as well as create, edit, or delete them.

For information about editing inventory documents, see:

- Purchase Invoices on page 37
- Sales Invoices on page 39

Items

The **Items** form allows you to view the list of items that can be purchased or sold, as well as create, edit, and delete them.

For each item, the following information is available:

- **Group.** The item group. You can select from available groups or create a new one.
- **Name.** The item description as it appears in the list.
- **Code.** The item code that is assigned automatically.
- **Item type.** The item type (inventory item, service, or expense).
- **Description.** The item name that is used in printed documents.
- **Comment.** Your comment to the item.

The following information is available on the **Main Parameters** tab:

- The item picture.

  To select a picture, you have to attach it to the document first. In the left pane, click **Attached Files** and create a picture file. Then return to the **Item** form and use the box under the picture box to select the file.

  When you select a picture, it is not yet displayed in the picture box. It will be displayed next time you open the **Item** form.
- **Unit of measure.** The measurement unit for these items.
- **Inventory account.** The account where the items arrive when they are purchased as inventory items.
- **Expenses account.** The account where the items arrive when they are purchased as expense items.
- **Sales revenue account.** The account where the money arrive when these items are sold.
- **Cost of revenue account.** The account where the money is taken from when these items are purchased.

The **Additional attributes** tab contains custom attributes. You can add or remove custom attributes in the **Additional Data and Attributes** form (see page 16).

Locked Files

The **Locked Files** form allows you to view files that you can edit, as well as edit them.

To open a file in the default program for this file type, double-click it.

To save the file in the application file storage and unlock the file, click **Save and Unlock**.

To open the file card, select the file and click **Open File Card**. For information about details available on the file card, see section "All Files" on page 18.

Object Versioning Settings

The **Object Versioning Settings** form allows you to enable or disable version history for some document and catalog types.

The **Object Versioning Settings** form is only available if you select the **Use object versioning subsystem** check box in the **Service Function Settings** form (see page 41).

For each object, the following information is available:

- **Object.** The document or catalog type.
- **Versioning rule.** Indicates when new document or catalog version numbers are added. The following options are available:
  - **Do not use versioning.** Do not use versioning for this document or catalog.
  - **Set version number on updating.** Add a new version number every time a document or catalog is saved.
  - **Set version number on posting.** Add a new version number every time a document or catalog is posted.
  - **Use default versioning rule.** The default versioning rule (it is always one of the three above rules).

Payment and Deduction Kinds

The **Payment and Deduction Kinds** form allows you to view the list of payment and deduction kinds for payroll calculations, as well as create, edit, and delete them.

For each payment or deduction kind, the following information is available:

- **Folder.** The folder where the payment or deduction kind is located. You can create custom folders for them.
- **Code.** The code of the payment or deduction kind, which is assigned automatically.
- **Description.** The name of the payment or deduction kind, as it appears in the list.
- **Type.** Shows whether it is a payment or deduction.
- **Account.** The account for this payment or deduction kind. This box is only available for payments and deductions (and not available for taxes).

- **Details.** Your comment to the payment or deduction kind.
- **Calculation formula.** The calculation formula for the payment or deduction kind.

Payroll Calculation

The **Payroll Calculation** form allows you to view the list of payroll calculations, as well as create, edit, and delete them.

The top part of the form contains filter options that you can apply to the list.

To create a payroll calculation, do the following:

1. In the **Payroll Calculation** form, click **Create**.
2. Click **Fill**.

   This automatically fills most of the fields with data taken from other documents, such as **Employee Positions and Pay Rates**. The list of employees is filled automatically for the accounting period starting from the day specified in the **Accounting period** field. Only people employed during this period are included.

   At this stage the payroll is not yet calculated.
3. Verify the data and then click **Calculate**.

   At this stage the payroll is calculated (values appear in the **Amount** column).

For each payroll calculation, the following information is available:

- **Number.** The payroll calculation number.
- **Date.** The payroll calculation date.
- **Accounting period.** The first day of the accounting period for the payroll calculation.
- **Company.** The company where the payroll calculation belongs.
- **Currency.** The currency used for payroll calculation.
- **Comment.** Your comment to the payroll calculation.
- **Total payment.** The total amount of money accrued to the specified employees during the specified accounting period.
- **Total deduction.** The total amount of money withheld from the specified employees during the specified accounting period.
- **Total amount.** The total amount of money paid to the specified employees during the specified accounting period.

For each employee in the payroll calculation, the following information is available:

- **Employee.** The employee name.
- **Employee #.** The employee number, unique within a company. It is assigned automatically.
- **Position.** The employee position.
- **Payment or deduction kind.** The payment or deduction kind.
- **Start date.** The start of the payroll calculation period.
- **End date.** The end of the payroll calculation period.

- **Days.** The number of work days in the payroll calculation period (used for calculations with daily pay rates).
- **Hours.** The number of work hours in the payroll calculation period (used for calculations with hourly pay rates).
- **Payment or deduction rate.** The payment rate for the specified payment or deduction kind.
- **Parameter 1, Parameter 2, Parameter 3, Value 1, Value 2, Value 3.** The parameters that are used in the payment or deduction formula, and their values.
- **Amount.** The amount of money paid to or deducted from the specified employee for the specified work time type during the specified accounting period.
- **GL account of expenses.** The general ledger account for this payment.

Payroll Documents

The **Payroll Documents** form allows you to view the list of payroll calculations, payroll sheets, and time sheets, as well as create, edit, or delete them.

The top part of the form contains filter options that you can apply to the list.

For information about editing payroll documents, see:

- Payroll Calculation on page 33
- Payroll Sheets on page 34
- Time Sheets on page 42

Payroll Sheets

The **Payroll Sheets** form allows you to view the list of employee payroll sheets, as well as create, edit, and delete them. Payroll sheets show how much money the company owes each of its employees.

The top part of the form contains filter options that you can apply to the list.

To fill a payroll sheet according to the payroll balance, click **Fill by Balance**.

For each payroll sheet, the following information is available:

- **Number.** The payroll sheet number.
- **Date.** The payroll sheet date.
- **Accounting period.** The first day of the accounting period for the payroll sheet.
- **Company.** The company where the payroll sheet belongs.
- **Document currency.** The payroll currency.
- **Comment.** Your comment to the payroll sheet.
- **Total payment.** The amount of money paid to all of the specified employees.

For each employee in the payroll sheet, the following information is available:

- **Employee.** The employee name.

- **Employee #.** The employee number, unique within a company. It is assigned automatically.
- **Payment.** The amount of money paid to the employee.

Personal Settings

The **Personal Settings** form allows you to specify your personal preferences.

The following information is available on the **Common** tab:

- **User Information.** Opens the user settings for the user who is logged on. For detailed information about these settings, see section "Users" on page 43.
- **Install File System Extension.** Installs the file system extension that allows file management in the web client of 1C:Enterprise.
- **Set Up Internet Connection.** Opens the Internet connection settings. You only need to specify them if you want to use the features that require Internet access, such as sending e-mails or downloading currency exchange rates.

The following information is available on the **File Operations** tab:

- **Action on double-clicking a file.** Shows whether double-clicking a file opens the file or opens the file card.
- **Prompt to choose between viewing and editing on double-clicking a file.** Shows whether double-clicking a file in the **Files by Folders** form prompts you to choose between viewing and editing it.

  This option can be turned off by selecting the **Do not ask any more** check box when you are prompted to choose.
- **Show tips on file editing in the web client.** Shows whether tips on file editing are displayed in the web client.
- **Prompt to view locked files upon exit.** Shows whether exiting the application prompts you to view the files that you locked.
- **Display "Size" column in the "All Files" form.** Shows whether the **Size** column is present in the **All Files** form.
- **Compare file versions using.** The application used for comparing a pair of text file versions. Available options include Microsoft Office Word and OpenOffice.org Writer.
- **Main Working Directory Options.** Allows you to specify settings for the directory where your local file copies are stored.
- **Scanner Settings.** Allows you to specify scanner settings. You can use a scanner for creating image files.

The following information is available on the **Print** tab:

- **Set Temporary File Folder.** Allows you to specify the folder for storing temporary files, which is required for printing documents.
- **Set Default Action for Double-clicking Print Template.** Allows you to select the default action for double-clicking a template in the **Printed Form Templates** form.

Petty Cash Expenses

The **Petty Cash Expenses** form allows you to view the list of petty cash expenses, as well as create, edit, and delete them.

For each petty cash expense, the following information is available:

- **Number.** The expense number.
- **Date.** The expense date.
- **Petty cash.** The petty cash where the expense belongs.
- **Company.** The company where the expense belongs.
- **Currency.** The expense currency.
- **Basis.** The document that the expense is based on.
- **Counterparty.** The counterparty that received the payment.
- **List.** Shows or hides the list of payments included in this expense.
- **Comment.** Your comment to the expense.
- **Total amount.** The total expense amount in the document currency.

For each payment, the following information is displayed:

- **Agreement.** The agreement with the counterparty, which allows them to accept the payment from your company.
- **Amount.** The expense amount in the currency that was used for paying.
- **Exchange rate.** The document currency exchange rate.
- **Payment amount.** The expense amount in the document currency. It is calculated using the following formula:

  *payment_amount = amount * payment_currency_exchange_rate / document_currency_exchange_rate*
- **Customer order.** The customer order on which the payment is based.
- **Purchase invoice** The purchase invoice on which the payment is based.

Petty Cash Receipts

The **Petty Cash Receipts** form allows you to view the list of petty cash receipts, as well as create, edit, and delete them.

For each petty cash receipt, the following information is available:

- **Number.** The receipt number.
- **Date.** The receipt date.
- **Petty cash.** The petty cash where the receipt belongs.
- **Company.** The company where the receipt belongs.
- **Currency.** The receipt currency.
- **Basis.** The document that the receipt is based on.
- **Counterparty.** The counterparty that issued the payment.
- **List.** Shows or hides the list of payments included in this receipt.
- **Comment.** Your comment to the receipt.

- **Total amount.** The total receipt amount in the document currency.

For each payment, the following information is displayed:

- **Agreement.** The agreement with the counterparty, which allows your company to accept the payment from them.
- **Amount.** The receipt amount in the currency that was used for paying.
- **Exchange rate.** The document currency exchange rate.
- **Payment amount.** The receipt amount in the document currency. It is calculated using the following formula:

  *payment_amount = amount * payment_currency_exchange_rate / document_currency_exchange_rate*
- **Customer order.** The customer order on which the payment is based (this document is issued by the counterparty).
- **Sales invoice.** The sales invoice on which the payment is based.

Positions

The **Positions** form allows you to view the list of employee positions for all managed companies.

For each position, the following information is available:

- **Code.** The position code that is assigned automatically.
- **Name.** The position name.

Printed Form Templates

The **Printed Form Templates** form allows you to view print templates for various document types, as well as edit or delete templates.

To view a template, select the template and click **View**.

To lock a template and open it for editing, select the template and click **Lock and Edit**.

To save a template being edited, close it and confirm that you want to save it.

To unlock a template, select the template and click **Save and Unlock**.

Purchase Documents

The **Purchase Documents** form allows you to view the list of purchase invoices and petty cash expenses, as well as create, edit, or delete them.

The top part of the form contains filter options that you can apply to the list.

For information about editing purchase documents, see:

- Purchase Invoices on page 37
- Petty Cash Expenses on page 36

Purchase Invoices

The **Purchase Invoices** form allows you to view the list of purchase invoices, as well as create, edit, and delete them.

For each purchase invoice, the following information is available:

- **Number.** The purchase invoice number.
- **Date.** The purchase invoice date.
- **Counterparty.** The vendor company.
- **Company.** Your company (the company that received the invoice).
- **Agreement.** The agreement with the vendor, which allows them to issue the purchase invoice.
- **Basis.** The document that the purchase invoice is based on.
- **Currency.** The currency that will be used to pay for the invoiced items.
- **Comment.** Your comment to the invoice.
- **Total amount.** The total price for all of the invoiced items.

The following information is available for all items on the **Items** tab:

- **Customer order.** The customer order for all of the invoiced items.

  The customer order can be displayed either here (a single order for all items) or in the list of items (an individual order for each item). This depends on the settings that you specify in the **Accounting Settings** form, on the **Field Positions** tab (see page 14).

The following information is available for each item on the **Items** tab:

- **Item.** The item name.
- **Quantity.** The item quantity.
- **UOM.** The unit of measure for this item.
- **Price.** The price for a single item.
- **Amount.** The total price.
- **Customer order.** The customer order for this item.

  The customer order can be displayed either here (an individual order for each item) or at the top part of the form (a single order for all items). This depends on the settings that you specify in the **Accounting Settings** form, on the **Field Positions** tab (see page 14).

The following information is available for all items on the **Additional Attributes** tab:

- **Number.** The incoming document number (it is the sales invoice issued by the counterparty).
- **Date.** The incoming document date.
- **Responsible.** The employee responsible for this order.

Sales Documents

The **Sales Documents** form allows you to view the list of customer orders, sales invoices, and petty cash receipts, as well as create, edit, or delete them.

The top part of the form contains filter options that you can apply to the list.

For information about editing sales documents, see:

- Customer Orders on page 24

- Sales Invoices on page 39
- Petty Cash Receipts on page 36

Sales Invoices

The **Sales Invoices** form allows you to view the list of sales invoices, as well as create, edit, and delete them.

For each sales invoice, the following information is available:

- **Number.** The sales invoice number.
- **Date.** The sales invoice date.
- **Counterparty.** The customer company.
- **Company.** Your company (the company that issued the invoice).
- **Agreement.** The agreement with the customer, which allows you to issue sales invoices to them.
- **Customer order.** The customer order for all of the invoiced items.

  The customer order can be displayed either here (a single order for all items) or in the list of items (an individual order for each item). This depends on the settings that you specify in the **Accounting Settings** form, on the **Field Positions** tab (see page 14).
- **Currency.** The currency that will be used to pay for the invoiced items.
- **Comment.** Your comment to the invoice.
- **Total amount.** The total price for all of the invoiced items.

The following information is available for each item on the **Items** tab:

- **Item.** The item name.
- **Quantity.** The item quantity.
- **UOM.** The unit of measure for this item.
- **Price.** The price for a single item, discounts not included.
- **Discount rate.** Total discount rate.
- **Amount.** The total price, discounts included.
- **Customer order.** The customer order for this item.

  The customer order can be displayed either here (an individual order for each item) or at the top part of the form (a single order for all items). This depends on the settings that you specify in the **Accounting Settings** form, on the **Field Positions** tab (see page 14).

The following information is available for all items on the **Additional Attributes** tab:

- **Responsible.** The employee responsible for this invoice.
- **Basis.** The document that the sales invoice is based on.

Scheduled and Background Jobs

The **Scheduled and Background Jobs** form allows you to view scheduled jobs and their history, as well as start, stop, and schedule them.

It is recommended that you schedule jobs instead of running them manually, and that you do not edit scheduled jobs because their default settings are perfect for most cases.

The **Scheduled Jobs** tab contains the list of jobs. For each job, the following information is available:

- **Description.** The job name as it appears in the list.
- **In use.** The job only runs at the scheduled time if this check box is selected. It is useful when you need to temporarily disable a scheduled job, without changing its schedule.
- **On error repeat, times.** The number of job run attempts if the previous run resulted in an error. The interval between attempts is specified in the **On error repeat in, sec** box.
- **On error repeat in, sec.** The interval between job run attempts if the previous run resulted in an error. The number of attempts is specified in the **On error repeat, times** box.
- **ID.** A unique job identifier for internal use. It is assigned automatically.
- **Key.** A job identifier that is used when you need to run multiple jobs that call the same method. Normally, while a job is running, another job calling the same method cannot start until the current one is finished. But if they have different keys, they are allowed to run simultaneously.
- **User name.** The account for running the job when it is scheduled. Note that when you start jobs manually, they run under your account.
- **Name.** The name of the scheduled job in the configuration. This information is for application administrators.
- **Synonym.** The synonym of the scheduled job in the configuration. This information is for application administrators.
- **Metadata method name.** The name of the method that is executed when you run the job. This information is for application administrators.
- **Messages and error descriptions.** This area contains messages and error descriptions generated during the last job execution.

The **Background Jobs** tab contains the log of job executions. It contains the following filters:

- **By status.** Select the job status. The following statuses are available:
  - **Executed**
  - **Completed with errors**
  - **Canceled**
  - **Running**
- **By period.** Select the period during which the job was started. The following periods are available:
  - **Custom.** A custom period
  - **No filter.** No filter
  - **Last night.** Last night,12 hours from 9:00 PM to 9:00 AM
  - **Yesterday.** 24 hours from 12:00 AM to 11:59 PM of the previous day

  - **Today.** 24 hours from 12:00 AM to 11:59 PM of the current day
- **By job name.** Select a job name from the list.

After you have specified the filter options, click **Refresh**.

To schedule a job, on the **Scheduled Jobs** tab, click **Schedule**, specify a schedule, and then click **OK**. If the application runs in the file mode, in addition to scheduling it, you have to start a separate session for running the scheduled jobs by clicking the button.

Service Function Settings

The **Service Function Settings** form allows you to specify settings that are applied to the entire infobase.

The **General Settings** tab contains the following settings:

- **Use object versioning subsystem.** Allows object versioning, and adds the **Object Versioning Settings** form to the application.
- **Use additional data and attributes.** Allows adding custom fields to forms, and adds the **Additional Data and Attributes** form to the application.
- **Use external users.** Allows adding external users, and adds the **External Users** form to the application.
- **Use full-text search.** Allows full-text search, and adds the **File Contents Indexing** form to the application. Note that full-text search does not work for encrypted files.
- **Full-Text Search Management.** Allows you to manually update and clear the full-text search index.
- **Do not allow negative balances.** If this check box is selected, the application does not allow posting documents that cause negative cash or inventory balances.
- **Internet access settings for 1C:Enterprise server.** Opens the internet connection settings for the 1C:Enterprise server. You only need to specify them if you want to use the server features that require Internet access. This is only applicable while the application is running in the client/server mode.

The **File Operations** tab contains the following settings:

- **Maximum file size.** The maximum size of files that you can store in the infobase, in bytes.
- **Extract file contents at server.** If this check box is selected, file contents indexing is performed on the 1C:Enterprise server. This is only applicable while the application is running in the client/server mode.

  If this check box is not selected, file contents indexing is performed on the client computer, and then the result is sent to the server.

  Text extraction is not available in the web client. If you use a web client, always select this check box.
- **File storage.** Shows whether the files are stored in the infobase or in a shared folder. Storing files in a shared folder reduces infobase size.

- **File storage volume settings.** Opens the file storage volume settings. These settings are only available if you select the "Volumes on hard disk" storage type.
- **Prohibit loading files with extensions.** Allows you to prohibit storing files with specific extensions. Type the extensions in capital letters and separate them with spaces. Example: "COM EXE BAT".

The **Classifiers** tab contains the following options:

- **Load.** Loads the list of country regions.
- **Clear.** Clears the list of country regions.
- **Check for Updates.** Checks whether the list of country regions is up to date.

Time Sheets

The **Time Sheets** form allows you to view employee time sheets, as well as create, edit, and delete them. Time sheets show how much time each of the employees worked.

To fill a time sheet according to the current calendar, click **Fill**.

For each time sheet, the following information is available:

- **Number.** The time sheet number.
- **Date.** The time sheet date.
- **Accounting period.** The first day of the accounting period for the time sheet.
- **Company.** The company where the time sheet belongs.
- **Data input method.** The time sheet scale (daily or total for the accounting period). When you change the scale, all time sheet data is cleared.
- **Comment.** Your comment to the time sheet.

For each employee in the time sheet, the following information is available:

- **Employee.** The employee name.
- **Employee #.** The employee number.
- **Position.** The employee position.

In the daily view, the time sheet displays up to three work time types for each day with hours worked.

In the total for accounting period view, the time sheet displays up to six work time types with total hours and days worked.

Units of Measure

The **Units of Measure** form allows you to view the list of measurement units available for use in documents, as well as create, edit, and delete them.

The following information is available for each measurement unit:

- **Abbreviation.** The measurement unit name, as it is displayed in the list of units.
- **International abbreviation.** The measurement unit abbreviation.

- **Code.** The measurement unit code. If you select a measurement unit from a predefined list, the code is taken from that list. If you enter a measurement unit manually, you have to enter the code.
- **Name.** The measurement unit name.

To add a unit of measure from the predefined list, in the **Units of Measure** form, click **Add from Classifier**, select the unit, edit its details, and then click **Write and close**.

Update Details

The **Update Details** form allows you to view release notes for installed updates.

Users

The **Users** form allows you to view the list of application users with their roles and authentication methods, as well as create, edit, and delete them.

For each user, the following information is available:

- **Full name.** The full name.
- **Allow access to infobase.** If this check box is selected, the user can log on to the application.

The following information is available on the **Infobase User Properties** tab:

- **Name.** The user name for logging on to the application.
- **1C:Enterprise authentication.** If this check box is selected and the **Operating system authentication** check box is not selected, the user can log on to the application using their 1C:Enterprise user name and password. This is the recommended option for the administrator.
- **Password.** The password for logging on to the application.
- **Confirm password.** The password confirmation. Enter the same password as you entered in the **Password** box.
- **User cannot change password.** If this check box is selected, the user cannot change their password.
- **Show in user list on the logon screen.** If this check box is selected, the user is added to the list of user names on the logon screen.
- **Operating system authentication.** If this check box is selected, the user can log on to the application using their Windows domain user name. This is the recommended option for everyone except the administrator.
- **OS user name.** The operating system user account that is used for accessing the application.
- **Interface language.** The application interface language for this user.
- **Application mode.** The application start mode: **Auto** (automatic mode selection), **Ordinary application**, or **Managed application**.
- **Roles.** Select the actions that the user is allowed to perform.

The **Addresses and Phones** tab contains the user contact info.

Work Time Types

The **Work Time Types** form allows you to view the list of time types used for payroll calculation (regular work time, overtime, sick leaves, and so on), as well as create, edit, and delete them.

For each work time type, the following information is available:

- **Alphabetic code.** The alphabetical code of the work time type.
- **Digital code.** The numeric code of the work time type.
- **Description.** The description of the work time type.

Reports

Balance Sheet

The **Balance Sheet** report allows you to view the balance sheet.

Cash Assets

The **Cash Assets** report allows you to view the report on petty cashes.

Event Log Monitor

The **Event Log Monitor** report allows you to view filtered event log, as well as schedule sending this log by e-mail.

Human Resources Accounting

The **Human Resources Accounting** report allows you to view the report on employee payments.

Inventory

The **Inventory** report allows you to view the inventory report.

Reports by Changes of the Object's Versions

The **Report by Changes of the Object's Versions** shows you the history of document changes.

Time Worked

The **Time Worked** report allows you to view the report on employee total work time.

The following predefined report variants are available:

- **Daily.** Shows data from time sheets with daily records.
- **Total for the period.** Shows data from time sheets with records for the specified accounting period.

Standard Subsystems

Developer Reference

This chapter provides a reference for subsystems included in the 1C:Subsystems Library.

Additional Reports and Data Processors

The **Additional Reports and Data Processors** subsystem allows you to implement the following features:

- Importing reports and data processors
- Generating reports and running data processors
- Specifying forms where report or data processor buttons are available
- Specifying access rights to reports and data processors

The **Additional Reports and Data Processors** subsystem adds the following form items:

- **Additional Reports** in the **Reports** box
- **Additional Data Processors** in the **Tools** box.
- Report and data processor buttons in various forms

Address Classifier

The **Address Classifier** subsystem allows you to implement the following features:

- Adding, editing, deleting, and importing postal addresses
- List of postal addresses for fast and easy selection
- Auto completion of postal address fields

The **Address Classifier** subsystem adds the following items to the **All actions** menu:

- **Import Address Classifier.** Starts the wizard that imports address classifiers (this does not remove existing address classifier entries)
- **Clear Address.** Clears all of the address-related fields in a form

Basic Functionality

The **Basic Functionality** subsystem includes the basic functionality for all applications that use 1C:Subsystems Library.

It allows you to implement the following features:

- Basic procedures and functions
- Setting application window title
- Selecting metadata objects
- Batch object changes
- Deletion of marked objects
- Form settings management

- List of references that are not taken into account during reference-dependent operations (such as object deletion)
- The Event Log

The **Basic Functionality** subsystem adds the following forms and form items:

- **Event Log** form (see page 27)
- **Delete Marked Objects** form (see page 25)
- **Form Settings Management** form (see page 30)
- **Choose Metadata Objects** form (allows you to select multiple metadata objects)
- **Batch Editing** form (allows you to change properties of multiple objects simultaneously)

Calendars

The **Calendars** subsystem allows you to implement the following feature:

- Multiple calendars that track working and nonworking days

The **Calendars** subsystem adds the following form:

- **Calendars** form (see page 20)

The **Calendars** subsystem initially contains no working days (all days are non-working).

Companies

The **Companies** subsystem allows you to implement the following feature:

- The list of companies

The **Companies** subsystem adds the following form:

- **Companies** form (see page 21)

Contact Information

The **Contact Information** subsystem allows you to implement the following features:

- Extending the list of catalog attributes by adding contact information attributes
- Automatic filling of some address fields (country, region, and so on) based on the postal code field

These attributes can be standard (such as e-mail or phone number) or custom (such as "phone number from 6:00 PM till 0:00 AM").

The **Contact Information** subsystem adds the following forms and form items:

- **Contact Information Kinds** form (see page 22)
- **World Countries** form (the list of countries with their codes)
- Various contact information fields (such as e-mail address or phone number)

Currencies

The **Currencies** subsystem allows you to implement the following features:

- List of available currencies
- History of currency exchange rates
- Download of currency exchange rates from the Internet

The **Currencies** catalog initially contains a single currency. This currency cannot be deleted; it is the default principal currency.

Dynamic Update Monitoring

The **Dynamic Update Monitoring** subsystem allows you to implement the following feature:

- Automatic check for dynamic configuration updates

If a dynamic configuration update is available, the user is prompted to restart the application.

E-mail Operations

The **E-mail Operations** subsystem allows you to implement the following features:

- Specifying e-mail account settings
- Sending e-mail messages

The **E-mail Operations** subsystem adds the following forms and form items:

- **E-mail Accounts** form on page 25
- The system e-mail account (a predefined item in the **E-mail Accounts** form)
- **Send Message** form (allows sending e-mail messages)

Event Log Monitoring

The **Event Log Monitoring** subsystem allows you to implement the following features:

- E-mailing notifications about critical level log entries to application administrators

The **Event Log Monitoring** subsystem adds the following reports:

- **Event Log Monitor** report (see page 44)

Get files From Internet

The **Get Files From Internet** subsystem allows you to implement the following features:

- Downloading files from the Internet
- Authentication for file download

The following protocols are supported: HTTP, HTTPS, and FTP.

The **Get Files From Internet** subsystem adds the following forms and form items:

- **Proxy Server Settings** form (opened from the **Personal Settings** form)
- **Proxy Server Settings** form (opened from the **Service Function Settings** form)

File Operations

The **File Operations** subsystem allows you to implement the following features:

- Managing files attached to configuration objects (creating, opening, locking, and versioning)

The **File Operations** subsystem adds the following forms and form items:

- **All Files** form (see page 18)
- **Files by Folders** form (see page 29)
- **File Contents Indexing** form (see page 28)
- **Attached Files** form (allows attaching files to documents)
- **File Versions** form (shows the list of file versions)
- **Unload Data and Archive Volumes** form (creates an infobase dump with files stored in volumes on the hard disk)
- Options for the main working directory in the **Personal Settings** form
- List of volumes for storing files on the hard disk

Full-Text Search

The **Full-Text Search** subsystem allows you to implement the following features:

-
- Full-text search in stored files

The **Full-Text Search** subsystem adds the following forms and form items:

- **Full Text Search Management** form (allows updating or clearing the search index)
- **File Contents Indexing** form (see page 28)
- The **Find** button

Individuals

The **Individuals** subsystem allows you to implement the following features:

- The list of individuals
- The list of identity document types
- The list of identity documents for each individual

The **Individuals** subsystem adds the following forms:

- **Individuals** form (see page 30)
- **Identity Document Kinds** form (see page 30)
- **Documents of Individuals** form (lists identity documents of individuals)

Infobase Version Update

The **Infobase Version Update** subsystem allows you to implement the following feature:

- Running data update procedures every time the version of the infobase configuration changes

For example, if a new field is added in the update, a data update procedure might prompt the user to fill the field in all documents.

The **Infobase Version Update** subsystem adds the following form:

- **Update Details** form (see page 43)

Item Order Setup

The **Item Order Setup** subsystem allows you to implement the following features:

- Specifying the order of entries in table boxes by adding a field and then sorting the table by it

The **Item Order Setup** subsystem adds the following form items:

- The hidden "order" field, which is used for sorting table entries
- The **Move item up** and **Move item down** buttons

Object Attribute Locking

The **Object Attribute Locking** subsystem allows you to implement the following feature:

- Allow or deny users to change specific object attributes

The **Object Attribute Locking** subsystem adds the following form item:

- **Allow Editing Object Attributes** item in the **All Actions** menu

Object Prefixes

The **Object Prefixes** subsystem allows you to implement the following features:

- Specifying object prefixes for each company
- Automatic addition of object prefixes to all company documents

Prefixes ensure that documents can be uniquely identified by the combination of prefix, number, and date.

Object Versioning

The **Object Versioning** subsystem allows you to implement the following features:

- Store and view document and catalog history
- Restore any previous document or catalog version
- Compare document versions

Two version control options are available: new version numbers are assigned every time the document is changed, or every time the document is posted.

The **Object Versioning** subsystem adds the following forms and reports:

- **Object Versioning Settings** form (see page 32)
- **Reports by Changes of the Object's Versions** form (see page 44)

Users have the option to disable versioning functionality for all of the documents and catalogs by selecting the **Use object versioning subsystem** check box (see Service Function Settings on page 41).

Printing

The **Printing** subsystem allows you to implement the following feature:

- Editing printed form templates in MXL, Microsoft Word document, or OpenOffice.org Writer document format

The **Printing** subsystem adds the following forms and form items:

- **Printed Form Templates** form (see page 37)
- The **Print** button
- The **Send by e-mail** button

Properties

The **Properties** subsystem allows you to implement the following features:

- Adding object attributes without changing infobase configuration
- Adding fields to forms

The **Properties** subsystem adds the following forms and form items:

- **Additional Data and Attributes** form (see page 16)
- **Additional Attributes** pane or tab
- **Additional Data** button

Scheduled Jobs

The **Scheduled Jobs** subsystem allows you to implement the following features:

- Scheduling jobs (each job is implemented as a procedure in the application configuration)
- Automatic execution of scheduled jobs
- History of job execution results

The **Scheduled Jobs** subsystem adds the following form:

- **Scheduled and Background Jobs** (see page 39)

Update Legality Check

The **Update Legality Check** subsystem allows you to implement the following feature:

- Prompting the user for confirmation that the application update is obtained legally

The **Update Legality Check** subsystem adds the following form:

- **Update Legality Check** form (requests confirmation that the application update is obtained legally)

User Session Termination

The **User Session Termination** subsystem allows you to implement the following features:

- Closing user connections to the infobase
- Allowing or denying new connections to the infobase

The **User Session Termination** subsystem adds the following forms:

- **Active Users** form (see page 14)
- **Infobase Connection Blocking** form (see page 30)

Users

The **Users** subsystem allows you to implement the following features:

- Managing users
- Managing external users
- Managing user groups

The **Users** subsystem adds the following forms:

- **Users** form (see page 43)
- **External Users** form (see page 28)

Usage Examples

The following section contains the list of important application objects and subsystems used for implementing these objects.

Documents

The following section contains the list of documents and subsystems used for implementing these documents.

Document	Subsystems used	Other notable mechanisms
Customer Order	Additional Reports and Data Processors Basic Functionality (form settings management) Companies Currencies E-mail Operations (the option to send a document by e-mail) Object Prefixes Object Versioning Printing (including print templates)	Filling assistant (the **Fill** button) Creating documents based on this document Printing Viewing the entire set of documents that are based on each other (the **View document hierarchy** button) Viewing register records for a document (the **View register records report** button) Counterparties and counterparty agreements Accumulation registers Measurement units

Document	Subsystems used	Other notable mechanisms
Event	Additional Reports and Data Processors Basic Functionality (form settings management) E-mail Operations (the option to send a document by e-mail) Object Versioning Printing (including print templates) Properties	Filling assistant (the **Fill** button) Printing Viewing the entire set of documents that are based on each other (the **View document hierarchy** button) Basic CRM functionality (implemented as events)
Opening Balance	Additional Reports and Data Processors Basic Functionality (form settings management) Companies Currencies E-mail Operations (the option to send a document by e-mail) Object Prefixes Printing (including print templates)	Printing Viewing register records for a document (the **View register records report** button) Accumulation registers Accounting registers Entering balances for all accounting sections in a single document
Payroll Calculation	Additional Reports and Data Processors Basic Functionality (form settings management) Companies Currencies E-mail Operations (the option to send a document by e-mail) Object Prefixes Printing (including print templates)	Accumulation registers Creating documents based on this document Filling based on HR data Payroll calculation Calculation of payroll calculation parameters Formulas for payment and deduction kinds Accounting periods Viewing the entire set of documents that are based on each other (the **View document hierarchy** button)

Document	Subsystems used	Other notable mechanisms
Payroll Sheet	Additional Reports and Data Processors Basic Functionality (form settings management) Companies Currencies E-mail Operations (the option to send a document by e-mail) Object Prefixes Printing (including print templates)	Accumulation registers Creating documents based on this document Filling based on payroll balances Accounting periods Viewing the entire set of documents that are based on each other (the **View document hierarchy** button)
Petty Cash Expense	Additional Reports and Data Processors Basic Functionality (form settings management) Companies Currencies E-mail Operations (the option to send a document by e-mail) Object Prefixes Printing (including print templates)	Filling based on another document (the **Fill according to the document that the petty cash expense is based on** button and other similar buttons) Creating documents based on this document Printing Viewing the entire set of documents that are based on each other (the **View document hierarchy** button) Viewing register records for a document (the **View register records report** button) Counterparties and counterparty agreements Accumulation registers Accounting registers The option to show or hide the list of entries, which allows to replace a single table entry with a set of form fields

Document	Subsystems used	Other notable mechanisms
Petty Cash Receipt	Additional Reports and Data Processors Basic Functionality (form settings management) Companies Currencies E-mail Operations (the option to send a document by e-mail) Object Prefixes Printing (including print templates)	Filling based on another document (the **Fill according to the document that the petty cash receipt is based on** button and other similar buttons) Creating documents based on this document Printing Viewing the entire set of documents that are based on each other (the **View document hierarchy** button) Viewing register records for a document (the **View register records report** button) Counterparties and counterparty agreements Accumulation registers Accounting registers The option to show or hide the list of entries, which allows to replace a single table entry with a set of form fields
Purchase Invoice	Additional Reports and Data Processors Basic Functionality (form settings management) Companies Currencies E-mail Operations (the option to send a document by e-mail) Object Prefixes Object Versioning Printing (including print templates)	Filling assistant (the **Fill** button) Creating documents based on this document Printing Viewing the entire set of documents that are based on each other (the **View document hierarchy** button) Viewing register records for a document (the **View register records report** button) Counterparties and counterparty agreements Accumulation registers Accounting registers Measurement units

Document	Subsystems used	Other notable mechanisms
Sales Invoice	Additional Reports and Data Processors Basic Functionality (form settings management) Companies Currencies E-mail Operations (the option to send a document by e-mail) Object Prefixes Object Versioning Printing (including print templates)	Filling assistant (the **Fill** button) Creating documents based on this document Printing Viewing the entire set of documents that are based on each other (the **View document hierarchy** button) Viewing register records for a document (the **View register records report** button) Counterparties and counterparty agreements Accumulation registers Accounting registers Measurement units
Time Sheet	Additional Reports and Data Processors Basic Functionality (form settings management) Calendars Companies E-mail Operations (the option to send a document by e-mail) Object Prefixes Printing (including print templates)	Time sheets Options for entering data: either daily or for the entire accounting period Accumulation registers Viewing the entire set of documents that are based on each other (the **View document hierarchy** button) Accounting periods Viewing register records for a document (the **View register records report** button)

Catalogs

The following section contains the list of catalogs and subsystems used for implementing these catalogs.

Catalog	Subsystems used	Other notable mechanisms
Items	Basic Functionality (form settings management) File Operations (attached files, pictures in the Items form) Properties (including additional attributes) Object Attribute Locking Object Versioning	Measurement units Linking accounts to objects for automatic document posting
Counterparties	Address Classifier (in contact information) Basic Functionality (form settings management) Contact Information Properties Users (external users)	Counterparty agreements Creating documents based on this document Bank accounts Viewing the entire set of documents that are based on each other (opened by the **View document hierarchy** button) Linking accounts to objects for automatic document posting
Employees	Additional Reports and Data Processors Basic Functionality (form settings management) Individuals Object Prefixes	Object creation assistant (used in the **Employee (create)** form) Linking accounts to objects for automatic document posting
Contact Information Kinds	Basic Functionality (form settings management) Item Order Setup	n/a
Companies	Additional Reports and Data Processors (additional reports) Basic Functionality (form settings management) Object Prefixes Properties	Bank accounts

Catalog	Subsystems used	Other notable mechanisms
Contact Persons	Basic Functionality (form settings management) Contact Information Object Versioning Properties	Creating documents based on this document

Information Registers

The following section contains the list of information registers and subsystems used for implementing these information registers.

Information register	Subsystems used	Other notable mechanisms
Employee Positions and Pay Rates	n/a	Payment and deduction kinds Linking accounts to objects for automatic document posting

Implementation Guidelines

Additional Reports and Data Processors

You can create reports and data processors, and then add them to the application. For each report or data processor, you have to write the following:

- AdditionalDataProcessorInfo function (see page 58)
- AdditionalReportsAndDataProcessorsOverrided Module (see page 61)

AdditionalDataProcessorInfo Function

Defines basic report or data processor properties.

Syntax

Function AdditionalDataProcessorInfo() Export

Return value

A structure that contains the following data:

- **Type.** The report or data processor type. The following values are available:
  - **AdditionalDataProcessor.** A data processor that is added to the application as an item in the **Additional Data Processors** list, in the **Tools** box.
  - **AdditionalReport.** A report that is added to the application as an item in the **Additional Reports** list, in the **Reports** box.
  - **CreatingOfLinkedObjects.** A data processor mainly used for creating documents based on a specific document. It is added to the application as an item in the **Create based on** menu.
  - **ObjectFilling.** A data processor mainly used for filling form fields. It is added to the application as the **Fill** button.
  - **PrintForm.** A data processor mainly used for generating printed form layouts. It is added to the application as an item in the **Print** menu.
  - **Report.** A report that is added to the application as an item in the **Reports** box.
- **Description.** The default report or data processor name. You can change it in the application.
- **Version.** The report or data processor version.
- **SafeMode.** Shows whether the report or data processor runs in safe mode. This is only applicable when the application runs in the file mode; it has no effect in other modes.

  The safe mode has the following limitations:

  - The report of data processor cannot enable the privileged mode (full access to the infobase).

  - The report of data processor cannot perform actions that are external to the 1C:Enterprise platform. This includes using COM objects, loading external components, executing operating system commands and external applications, accessing the file system except for temporary files, and accessing the Internet.
- **Information.** The report or data processor description, as it appears in the application.
- **Commands.** The table of report or data processor commands.
  - **ID.** The hidden command ID. The IDs must be unique within a single report or data processor.
  - **Presentation.** The command name, as it appears in the list of commands.
  - **Modifier.** Shows whether the report or data processor uses the Print subsystem.
    - **"PrintMXL".** The report or data processor outputs its result to a SpreadsheetDocument object that is displayed in the **Printing documents** form of the Print subsystem.
    - **"" (empty string).** The report or data processor does not use the Print subsystem. You have to write a custom procedure for printing the document.
  - **ShowAlert.** Shows whether the following alerts are displayed:
    - "Executing data processor…" after the report or data processor is started.
    - "Data processor completed…" after the report or data processor is executed.
  - **UsageVariant.** The action type that the command performs, one of the following:
    - **OpenForm.** Opens a form.
    - **CallClientMethod.** Calls a client method. This action type is only available for data processors.
    - **CallServerMethod.** Calls a server method. This action type is only available for data processors.
- **Assignments.** The list of documents where the report or data processor is added by default. You can edit this list in the **Additional Reports and Data Processors** form.

Example

```
Function AdditionalDataProcessorInfo() Export


    Structure = New Structure;
    //Enums.AdditionalReportAndDataProcessorTypes
    Structure.Insert("Type", "AdditionalDataProcessor");
    Structure.Insert("Description", "External Data Processor Template");
```

```
    Structure.Insert("Version", "1.01");
    Structure.Insert("SafeMode", True);
    Structure.Insert("Information", "Template");

    Commands = New ValueTable;
    Commands.Columns.Add("ID");
    Commands.Columns.Add("Presentation");
    Commands.Columns.Add("Modifier");
    Commands.Columns.Add("ShowAlert");
    Commands.Columns.Add("UsageVariant");

    NewRow = Commands.Add();
    NewRow.ID = "Form";
    NewRow.Presentation = "Open Form";
    NewRow.Modifier   = "";
    NewRow.ShowAlert = False;
    NewRow.UsageVariant = "FormOpening";

    NewRow = Commands.Add();
    NewRow.ID = "ClientMethod";
    NewRow.Presentation = "Call Client Method";
    NewRow.Modifier   = "";
    NewRow.ShowAlert = False;
    NewRow.UsageVariant = "CallClientMethod";

    NewRow = Commands.Add();
    NewRow.ID = "ServerMethod";
    NewRow.Presentation = "Call Server Method";
    NewRow.Modifier   = "";
    NewRow.ShowAlert = True;
    NewRow.UsageVariant = "CallServerMethod";

    Structure.Insert("Commands", Commands);

    Assignments = New Array;
    Assignments.Add("Document.CustomerOrder");

    Structure.Insert("Assignments", Assignments);

    Return Structure;
EndFunction
```

AdditionalReportsAndDataProcessorsOverrided Module

The module includes the following functions:

- GetAdditionalDataProcessorCommonCommands – defines the available commands for starting a data processor.
- GetAdditionalReportCommonCommands – defines the available commands for starting a report.

Syntax

- Function GetAdditionalDataProcessorCommonCommands() Export
- Function GetAdditionalReportCommonCommands() Export

Return value

An array of enumerated command names.

Example

```
Function GetAdditionalDataProcessorCommonCommands() Export

    CommandsTable =
        AdditionalReportsAndDataProcessors.CreateCommandsTable();

    AdditionalReportsAndDataProcessors.AddCommand(CommandsTable,
        // The command name
        "AdditionalDataProcessorsAdministration",
        // Presentation in the list of available commands
        NStr("en = 'Default list'"));

    Return CommandsTable;

EndFunction

Function GetAdditionalReportCommonCommands() Export

    CommandsTable =
        AdditionalReportsAndDataProcessors.CreateCommandsTable();

    AdditionalReportsAndDataProcessors.AddCommand(CommandsTable,
        // The command name
        "AdditionalReportsAdministration",
        // Presentation in the list of available commands
        NStr("en = 'Default list'"));
```

```
    Return CommandsTable;

EndFunction
```

Exceptions for the List of References

You can define the list of references that are not taken into account during reference-dependent operations (such as object deletion) in the CommonUseOverrided module.

CommonUseOverrided Module

The module includes the following function:

- GetRefSearchExclusions – returns the list of metadata object names that can refer to different metadata objects without affecting the business logic of the application.

Syntax

Function GetRefSearchExclusions() Export

Return value

A list of metadata object names that can refer to other metadata objects without affecting the business logic of the application.

Example

```
Function GetRefSearchExclusions() Export

      Array = New Array;

      Array.Add(Metadata.InformationRegisters.CurrencyRates.FullName());
      Array.Add(Metadata.InformationRegisters.ObjectVersions.FullName());
      Array.Add(Metadata.InformationRegisters.AdditionalInfo.FullName());

      Return Array;

EndFunction
```

Integration Guidelines

1C:Subsystems Library is delivered as a standalone distribution package.

To use 1C:Subsystems Library functionality in your application, you have to integrate the library with the application configuration.

Option	Integration procedure
Create a new application with 1C:Subsystems Library functionality	1. Install 1C:Subsystems Library. 2. Create an application based on 1C:Subsystems Library configuration. 3. Configure 1C:Subsystems Library objects.
Add 1C:Subsystems Library functionality to an existing application	1. Install 1C:Subsystems Library. 2. Add metadata objects to your configuration. 3. Configure 1C:Subsystems Library objects. 4. Refactor configuration modules.

The integration procedure steps are described in detail in the following sections.

Installing 1C:Subsystems Library

Run the file setup.exe from the 1C:Subsystems Library distribution package and follow the on-screen instructions.

During the installation the following files are copied to your hard disk:

- 1Cv8.cf – a configuration that includes 1C:Subsystems Library
- 1Cv8.dt – a demo application based on 1C:Subsystems Library (1C: SL Demo)

These files are located in the \1c\slen\<*version number*>\ subdirectory of the 1C:Enterprise 8.2 templates directory.

Creating Applications Based on 1C:Subsystems Library Configuration

Create an infobase and use the file 1Cv8.cf as a template. This allows you to use 1C:Subsystems Library functionality in your application.

Adding Metadata Objects to Your Configuration

Since your application has its own metadata objects, it requires careful merging with 1C:Subsystems Library metadata objects.

To add 1C:Subsystems Library metadata objects

1. Open the application configuration in Designer.
2. On the **Configuration** menu, click **Compare and Merge with Configuration from File**.
3. Select the file 1Cv8.cf, and then click **Open**.
4. In the **Designer** dialog box, click **Yes**.

5. In the **Compare and Merge Base configuration** dialog box, clear all check boxes.
6. Click **Actions** and then click **Against file subsystems**.
7. In the **Filter by Subsystem** dialog box, select the following subsystems:
    - Mandatory subsystems (see section "Subsystem Dependencies" on page 64)
    - Optional subsystems that you want to use in your application
    - Subsystems that the selected subsystems depend on (see section "Subsystem Dependencies" on page 64)
8. Click **Set**.
9. In the **Compare and Merge Base configuration** dialog box, in the **File** column, expand the node <*configuration name*>/Common/Subsystems/StandardSubsystems, and then select the check boxes matching the subsystems that you selected in step 7.
10. In the **Base configuration** column, select or clear check boxes for objects and properties as specified in section "Objects That Require Changes When You Add Subsystems" on page 66.
11. In the **Merge Mode and Subordinate Objects Sequence** column, select **Order from file** for all objects and **Use from file** for all object items.
12. Click **Execute**, and wait until Designer merges the configurations.
13. In the **Unresolved references** dialog box, click **Continue**.
14. In the **Support Rules Settings** dialog box, click **OK**.
15. In the **Designer** dialog box, click **OK**.

Subsystem Dependencies

The following table describes subsystem dependencies.

Subsystem	Depends on
Mandatory subsystems	
Basic Functionality	n/a
Infobase Version Update	n/a
Users	Contact Information Individuals
Optional subsystems	
Additional Reports and Data Processors	Printing
Address Classifier	Contact Information Get Files From Internet
Calendars	n/a

Subsystem	Depends on
Companies	Contact Information
Contact Information	Address Classifier Item Order Setup
Currencies	Get Files From Internet
Dynamic Update Monitoring	n/a
E-mail Operations	n/a
Event Log Monitoring	E-mail Operation Scheduled Jobs
File Operations	Full-Text Search Properties
Full-Text Search	n/a
Get Files From Internet	n/a
Individuals	n/a
Item Order Setup	n/a
Object Attribute Locking	n/a
Object Prefixes	n/a
Object Versioning	n/a
Printing	E-mail Operations
Properties	Item Order Setup Object Attribute Locking
Scheduled Jobs	n/a
Update Legality Check	n/a
User Session Termination	n/a

Objects That Require Changes When You Add Subsystems

The following table describes objects that you have to change after you add subsystems.

Subsystem	Object	Change
Basic Functionality	Language: English	Select the check box

Configuring 1C:Subsystems Library

When you add 1C:Subsystems Library to your application, consider refactoring its script to ensure its uniformity and consistency.

Pay special attention to modules of the root configuration object, as well as to customizable common modules (their names end with "Overrided"), because these modules cannot be updated automatically.

Use the following recommendations for configuring customizable common modules:

- Read the descriptions of export procedures and functions in their comments. If necessary, write implementations for these procedures and functions.

  Customizable modules of some subsystems include script blocks that use other subsystems. They look like this:

  ```
  // <SubsystemName>
     ...
  // End <SubsystemName>
  ```

  Remove the script related to subsystems that you do not use.
- Configure metadata objects as described in the table below.
- Every time you refactor a customizable common module, save new export procedures and functions, remove obsolete procedures and functions, and ensure that their comments and parameters exactly match comments and parameters provided in 1C:Subsystems Library. Write implementations for new procedures and functions and revise implementations for the rest of them.

#	Object	Procedure
Common 1C:Subsystems Library objects		
1	Session module	Copy the SessionParametersSetting handler from the 1C:Subsystems Library configuration to your configuration.

<table>
<tr><th>#</th><th>Object</th><th>Procedure</th></tr>
<tr><td>2</td><td>Managed application module
Ordinary application module</td><td>In BeforeStart and OnStart handlers, copy the script marked with the following comments from the 1C:Subsystems Library configuration to your configuration:<pre>// StandardSubsystems
    ...
// End StandardSubsystems</pre>Also copy the script where global variables are defined.</td></tr>
<tr><td>3</td><td>Role: "Full access"</td><td>Remove the "Interactive delete" right from all metadata objects.</td></tr>
<tr><td colspan="3">Subsystem: Additional Reports and Data Processors</td></tr>
<tr><td>4</td><td>Common commands:
AdditionalReportsAndDataProcessorsFillObject
AdditionalReportsAndDataProcessorsReports
AdditionalReportsAndDataProcessorsPrintForms
AdditionalReportsAndDataProcessorsCreatingLinkedObjects</td><td>For each command, define the configuration objects whose forms allow access to additional reports and data processors of that type.
Specify these object types in the "Command parameter type" property of each command.</td></tr>
<tr><td colspan="3">Subsystem: Companies</td></tr>
<tr><td>5</td><td>Catalog: "Companies"</td><td>Add the "Companies" catalog to the command interface.</td></tr>
<tr><td colspan="3">Subsystem: Contact Information</td></tr>
<tr><td>6</td><td>Event subscription: "FillContactInformation"</td><td>Define the configuration objects that include contact information.
Specify these object types in the "Source" property of the event subscription.</td></tr>
<tr><td>7</td><td>Catalog: "ContactInformationKinds"</td><td>Create a set of predefined catalog items, if needed for your configuration.</td></tr>
<tr><td colspan="3">Subsystem: Currencies</td></tr>
<tr><td>8</td><td>Catalog: "Currencies"</td><td>Add the "Currencies" catalog to the command interface.</td></tr>
</table>

#	Object	Procedure
Individuals		
9	Catalogs: • IdentityDocumentKinds • Individuals	If necessary, add attributes, forms, commands, templates, and predefined elements according to your application logic.
Subsystem: File Operations		
10	Common command: "AttachedFiles"	Define configuration objects that will contain attached files. Specify these object types in the "Command parameter type" property.
11	Catalog: "Files"	Define configuration objects that will use the subsystem (create the list of objects with files). Include the mandatory catalog "FileFolders" in this list. Specify links to objects with files in the following properties: • "Type" property of the "FileOwner" attribute • "Type" property of the "FileOwner" parameter of the ItemForm
Subsystem: Properties		
12	Common command: "AdditionalData"	Define configuration objects that will use the subsystem (create the list of objects with additional data and attributes). Specify links to these objects in the "Command parameter type" property.
13	Catalog: "AdditionalDataAndAttributesSettings"	For each object with additional data and attributes, create a set of predefined elements having the following format: Type_Name. For example, Catalog_Individiuals.

#	Object	Procedure
14	Chart of characteristic types: "AdditionalDataAndAttributes"	Specify additional data and attribute types. You can extend the list of data types with any metadata object types. It is recommended that you add links to "Currencies", "Users", and "Individuals" catalogs to the additional data and attribute types (provided that you added the corresponding subsystems).
15	Information register: "AdditionalData"	In the "Object" dimension data type, specify the list of links to objects with additional data and attributes.
Subsystem: Users		
16	Catalogs: • ExternalUsers, AuthorizationObject attribute • ExternalUserGroups, AuthorizationObjectType attribute Common command: "FormCommonCommandExternalUserObjectAuthorization"	Define configuration objects that will be mapped to external users. For example, you can map the following catalogs to external users: Individuals, Employees, and Counterparties. Specify available external user types in "AuthorizationObject" and "AuthorizationObjectType" attributes. Specify available external user types in the "Command parameter type" property of the command.
17	Event subscription: "UpdateExternalUserPresentation"	Specify available external user types in the "Source" property.

Refactoring Configuration Modules

To keep your code uniform, consider revising all of your configuration modules and replacing your custom implementations with standard 1C:Subsystems Library implementations.

About 1C Company

1C Company was established in 1991, for the purposes of software development, distribution, publishing and support of computer applications and databases for business and home use. 1C Company works with clients through more than 10,000 partners in 600 cities in Russia and Eastern Europe, including 7,000 certified 1C:Franchising companies to provide integration services for the automation of businesses.

Apart from 1C:Enterprise, the best known 1C Company business lines are software products for home use and educational applications.

The 1C:Enterprise system of programs is used daily by several million users in business and government to automate operations, accounting, finance, HR and management activities. 1C Company provides an array of vertical solutions for manufacturing, distribution and service businesses. With its innovative technological platform, 1C:Enterprise and a range of other applications, 1C Company has achieved wide popularity for its openness, fast modifications and software updates. 1C:Enterprise is a very flexible and scalable platform which meets the needs of companies ranging in size from a single user to hundreds of users. 1C Company is the market leader in enterprise automation in Russia, Ukraine, Kazakhstan and Belarus and is used widely in the global market.

For references visit: www.1c.ru/eng and www.1c-dn.com.