1. Home .................................................................................................................. 2
  1.1 Copyright .......................................................................................................... 4
  1.2 Fundamentals and Background ...................................................................... 6
  1.2.1 Introduction Goal and Structure ................................................................. 7
  1.2.2 Design Principles ...................................................................................... 10
  1.2.3 Pattern-Based Design .............................................................................. 35
  1.2.5 Keyboard Navigation .............................................................................. 40
  1.2.6 Analytics ................................................................................................. 43
  1.2.7 Business Task Management .................................................................... 48
  1.2.8 Collaboration Window ............................................................................ 50
  1.2.9 Control Center Home .............................................................................. 55
  1.2.10 Document Center .................................................................................. 58
  1.2.11 Enterprise Search .................................................................................. 62
  1.2.12 Help, Sticky Notes, Tags, Shelf ............................................................... 66
  1.2.13 Office Integration .................................................................................. 70
  1.2.14 Personalization and Adaptation ............................................................... 77
  1.3 Floorplans and Patterns ............................................................................... 78
  1.3.1 F - Fact Sheet .......................................................................................... 81
  1.3.2 F - Guided Activity .................................................................................. 85
  1.3.3 F - Modal Dialog ...................................................................................... 89
  1.3.4 F - Object Instance .................................................................................. 92
  1.3.5 F - Quick Activity .................................................................................... 96
  1.3.6 F - Work Center ...................................................................................... 100
  1.3.7 Addresses ............................................................................................... 104
  1.3.8 Analysis Pattern ...................................................................................... 106
  1.3.9 Attachments ............................................................................................ 111
  1.3.10 Browse & Collect .................................................................................. 113
  1.3.11 Calendar ............................................................................................... 116
  1.3.12 Changes ............................................................................................... 118
  1.3.13 Confirmation Dialog ............................................................................ 121
  1.3.14 Custom Pane ........................................................................................ 122
  1.3.15 Document Flow .................................................................................... 124
  1.3.16 Find Form ............................................................................................. 127
  1.3.17 Form Pane ............................................................................................. 130
  1.3.18 Gantt Chart .......................................................................................... 132
  1.3.19 Hierarchical Graph .............................................................................. 141
  1.3.20 Identification Region .......................................................................... 143
  1.3.21 Image ..................................................................................................... 145
  1.3.22 Information Consumer Pattern ............................................................ 147
  1.3.23 List Pane ............................................................................................... 153
  1.3.24 Master-Detail ....................................................................................... 156
  1.3.25 Notes ..................................................................................................... 159
  1.3.26 Object Value Selector .......................................................................... 161
  1.3.27 Object Worklist .................................................................................... 168
  1.3.28 Quick Filter .......................................................................................... 171
  1.3.29 Service Map ........................................................................................ 173
  1.4 Interaction Models ....................................................................................... 174
  1.4.1 Action Navigation ................................................................................... 180
  1.4.2 Add and Delete Rows ........................................................................... 182
  1.4.3 Adobe PDF Forms ................................................................................ 184
  1.4.4 Approvals View ..................................................................................... 187
  1.4.5 Business Configuration ........................................................................ 193
  1.4.6 Creating Business Objects ................................................................... 197
  1.4.7 Editing Business Objects ...................................................................... 200
  1.4.8 Mass Change ......................................................................................... 202
  1.4.9 MDRG .................................................................................................. 205
  1.4.10 Output Management ........................................................................... 211
  1.4.11 Save, Cancel, and Close ..................................................................... 215
  1.4.12 Text Translation ................................................................................... 217
  1.5 Specific Topics ............................................................................................. 217
  1.5.1 Forms & Fields ....................................................................................... 218
  1.5.2 Icons ....................................................................................................... 228
  1.5.3 Date & Time ........................................................................................... 230
  1.5.4 Functions & Menus ............................................................................... 235
  1.5.5 Object Identifier ..................................................................................... 245
  1.5.6 Positive and Negative Values ................................................................. 247
  1.5.7 Primary Help .......................................................................................... 249
  1.5.8 System Messages ................................................................................... 252
  1.5.9 Tables ..................................................................................................... 254
  1.5.10 Value Help ............................................................................................ 260
  1.5.11 Wording ........................................................................................-------- 264
  1.6 Index ............................................................................................................. 268
  1.7 User Guidelines (Mobile, Partner) ................................................................. 272
  1.8 Picture Legend ............................................................................................. 273
  1.9 Abbreviations ............................................................................................... 274
SAP Business ByDesign UI Styleguide Version 2012

Main Chapters

Fundamentals and Background
Introduces the ByD basic UI concepts like patterns, floorplans, and navigation as well as cross-topics. This chapter is not needed for your daily design work.

Floorplans and Patterns
Guides you through the right usage of floorplans and patterns (pages indicated with "F." are floorplans).

Interaction Models
Provides all necessary information for designing dialogs and flows for certain types of interaction, including how to create and change objects, how to save, print, and find them. You will find information on how to navigate between windows. Additionally you get introduced to "Business Configuration" which enables customers to adapt ByD to their business processes and needs.

Specific Topics
Explains on a detailed level the right usage of controls, where to place functions into the toolbar, where to position elements, how to translate texts, etc.

FAQ

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>When will a new version of the Styleguide be published?</td>
<td>In sync with ByD releases</td>
</tr>
<tr>
<td>How do I see what has changed since the last publication?</td>
<td>See the excel sheet: Styleguide Changes</td>
</tr>
<tr>
<td>How do I print the Styleguide?</td>
<td>PDF Version 2012</td>
</tr>
<tr>
<td>How do I search?</td>
<td>On top left you can enter a search string or browse the index.</td>
</tr>
<tr>
<td>How can I suggest corrections?</td>
<td>Send an email to Roger Bartel</td>
</tr>
</tbody>
</table>
How To Use This Styleguide

The links in the left side navigation panel launch pages where you will find all information for the respective topic. Each page is structured into sections presenting an introduction, consistency guidelines, and best-practices. Start reading the first five pages in Fundamentals and Background.

Technical Information

Further technical information is shown in red boxes when needed. Red boxes state a workaround or reduction.

Example:

Guidelines for UI Development
The list menu which contains functions such as Select All is not available in FP3.5.

Picture Legend, Abbreviations, Typography

The Picture Legend page shows an example floorplan to explain the elements used in floorplan and pattern pictures. The Abbreviations page lists acronyms and abbreviations. Italics font (Example text) is used for words or characters quoted from the screen. These include, for example, field labels, screen titles, button labels. Upper case (STRL+S, ENTER) is used for keys on the keyboard.

Disclaimer

© 2012 SAP AG. All rights reserved. See Copyright.
The Styleguide is a living document. This does not mean that the rules and design patterns described in the guideline will keep changing. Goal is to keep the guidelines and the applications UI as stable as possible. The guidelines team will continuously monitor requirements and eventually perform changes or additions.

Screenshots from the system are indicated as such. In some cases they are not 100% Styleguide compliant. Please refer always to the consistency rules.

SAP Business ByDesign Studio does not cover all UI functions described in this Styleguide.
The Styleguide is for internal use only. It is provided without any warranty of any kind, either express or implied.

About

Contact: Roger Bartel

🌟 Tag Cloud

import, export, excel, bydesign, ux, ui, analytics, floorplan, pattern-based, design, trademark, uiguidelines, favourite, styleguide, home, content, welcome, howto, guideline, topics, models, chapters, picker, date, options, select, technical-userid, names, status, dynamic, form, name-field, master-detail, multiple-addresses, pattern, generic, international, format, address, addresses, organizations, interaction, feature, suggest, tag, enterprise, tags, cloud, search, alignment, length, value, forms, fields, melting, gestures, ipad, styleguides, guidelines, phone7, blackberry, iphone, mobile, partner, favorite, navigation, shelf, favorites, flags, infoarea, infobar, tabbed, views, task, shortcuts, paradigms, cuibb, filter, quick, report, shell, common, pull, push, support, user
SAP AG
Dietmar-Hopp-Allee 16
69190 Walldorf
Germany
T +49/18 05/34 34 34
F +49/18 05/34 34 20
www.sap.com

© 2012 SAP AG. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP AG.
The information contained herein may be changed without prior notice.
Some software products marketed by SAP AG and its distributors contain proprietary software components of other software vendors.

Microsoft, Microsoft Windows, Microsoft Excel, Microsoft Outlook, Microsoft PowerPoint, Microsoft Word, Microsoft Windows Phone 7, Microsoft Office are registered trademarks of Microsoft Corporation.

Linux is the registered trademark of Linus Torvalds in the U.S. and other countries.

Adobe, the Adobe logo, Acrobat, PostScript, and Reader are either trademarks or registered trademarks of Adobe Systems Incorporated in the United States and/or other countries.

iPhone, iPod®, iPad® are registered trademarks of Apple Inc.

BlackBerry® is a registered trademark of Research In Motion Limited

Oracle and Java are registered trademarks of Oracle and/or its affiliates.

UNIX, X/Open, OSF/1, and Motif are registered trademarks of the Open Group.

Citrix, ICA, Program Neighborhood, MetaFrame, WinFrame, VideoFrame, and MultiWin are trademarks or registered trademarks of Citrix Systems, Inc.
HTML, XML, XHTML and W3C are trademarks or registered trademarks of W3C®, World Wide Web Consortium, Massachusetts Institute of Technology.
SAP, R/3, SAP NetWeaver, Duet, PartnerEdge, ByDesign, SAP BusinessObjects Explorer, StreamWork, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and other countries. Business Objects and the Business Objects logo, BusinessObjects, Crystal Reports, Crystal Decisions, Web Intelligence, Xcelsius, and other Business Objects products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of Business Objects Software Ltd. Business Objects is an SAP company. Sybase and Adaptive Server, iAnywhere, Sybase 365, SQL Anywhere, and other Sybase products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of Sybase, Inc. Sybase is an SAP company.

All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary.

These materials are subject to change without notice. These materials are provided by SAP AG and its affiliated companies (“SAP Group”) for informational purposes only, without representation or warranty of any kind, and SAP Group shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP Group products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

Disclaimer

Some components of this product are based on Java™. Any code change in these components may cause unpredictable and severe malfunctions and is therefore expressively prohibited, as is any decompilation of these components.

Any Java™ Source Code delivered with this product is only to be used by SAP’s Support Services and may not be modified or altered in any way.

Documentation in the SAP Corporate Portal

You can find this documentation at the following Internet address: https://portal.wdf.sap.corp/go/uiguidelines
Fundamentals and Background

This chapter describes the ByD "Design Principles", the basic "Design Concepts" and all background knowledge needed to understand the overall SAP Business ByDesign UI concepts.

This chapter does not provide guidelines for your daily design of mock-ups.
Introduction Goal and Structure

Fundamentals and Background > Introduction Goal and Structure

Page Content
Goal
Structure

Goal

The SAP Business ByDesign User Interface Styleguide describes the User Interface for SAP Business ByDesign. It consists of a set of rules and principles for the layout and navigation behavior of all used User Interface components. It guides User Experience Designers, User Experience Advocats and Solution Managers through developing mock-ups and UI Developers configuring the application screens.

Mock-up development tools like UI Designer or Visio Stencils for ByD implement the ByD Styleguide.

Target Groups of ByD UI Styleguide

- User Experience Designers to know the detailed UI concepts and design rules for designing ByD screens
- Solution Managers to understand the overall UI concepts
- User Experience Advocats and UI Developers to understand UI concepts relevant for the UI implementation
- Knowledge Managers and Information Developers to understand documentation relevant parts of the UI concept

Structure

The ByD UI Styleguide consists of the following main chapters:

- Fundamentals and Background provides information to understand the whole ByD UI concept. It is not needed for your daily work.
- Floorplans and Patterns explains the pattern-based concepts.
- Interaction Models focuses on dynamic behaviour and interaction.
- Specific Topics concentrates on detailed design questions more or less at the control level.
Design Principles

Fundamentals and Background > Design Principles

Page Content
Design Principles

Design Principles

With these user interface guidelines we provide a competitive user experience at consumer grade level. To achieve this, the guidelines are surrounded by supporting tools like the UI Designer to achieve a fast and easy configuration of the User Interface (fully supporting the interaction paradigm as described in this styleguide). Extensive adaptation and personalization features for partners, key users and users allow to adjust the User Interface according to the needs of the customer, and a consistent and intuitive navigation concept provides a coherent user experience.

The ByD User Interface concept is characterized by a dedicated interaction paradigm. Selected design principles guide the definition and usage of reusable building blocks.

Reusable building blocks are based on specific and generic UI patterns and UI floorplans that have been created based on fundamental usability concepts.

Major Interaction Concepts

These guidelines have been created based on leading design principles. These principles are targeted to serve our customers and end users. Any decision taken in the process of defining these guidelines was validated against these principles.

- Simplified user interface for intuitive usage
- Supportive task flows by pushing tasks and action data to the user (alerting, delegating)
- Progressive Disclosure to allow faster task completion
- Easy to adapt user interface to comply with personal and company specific needs
- Consistent user interface across application areas by usage of predefined building blocks
- Seamless integration with regards to business processes, documents, and technical implementation

Simplified User Interface

- Simplified form layout: Two columns, reduced number of fields per group, reduced number of groups, adjusted field length, personalizable fields and section groups (which means that the user can hide fields and section groups and show them again)
- Simplified tables: Reduced number of visible columns in tables, easy filtering and sorting capabilities, personalizable columns (hiding of columns)
- Simplified function selection: Context related toolbars display only functions which are applicable
- Simple but flexible navigation by just clicking links or buttons
- Minimized number of key clicks to complete a business process
- Reduced memory load by allowing to select tasks and objects from lists
- Full keyboard usage support
- Integrated primary help texts and extensive help capabilities

Supportive Task Flow

- Users begin their experiences either at the Control Center (CC, called Home in the UI) or at the Work Center (WoC).
- Since the system recognizes the user according to their role, daily work can be presented without any need for searching.
- Pattern-based UIs are tailored to the users’ needs in the following ways:
  - From the Control Center users can immediately start from the Work Inbox.
  - From the Work Center users get specific information on tasks and objects of an application area.
- Quick and easy tasks can be performed with a one click action (for example approvals of leave requests).
- More involved actions can open a Quick Activity Floorplan (QAF).
- More complex or data intensive actions can open an Object Instance Floorplan (OIF).
- For actions requiring serial guidance, a Guided Activity Floorplan (GAF) can open.
- Data analysis with integrated simplified analytics within a Information Consumer Pattern (ICP) is available.
- For sophisticated data analysis, the capability of drill-down from an aggregated, simplified report view (ICP) to the full Analysis Pattern (AP) with all the dice-and-slice features is available.

Progressive Disclosure

According to Jakob Nielsen (2006), Progressive Disclosure is defined as: “Progressive disclosure defers advanced or rarely used features to a secondary screen... Progressive disclosure thus improves three of usability’s five components: learnability, efficiency of use, and error rate.”

The overall navigation concept supports the principles of progressive disclosure by allowing the users to complete a task most often on the first screen (WoC) or the second screen (QAF, Fact Sheet) already. Only for data intensive entry tasks a third screen (Object Instance) is needed.

Benefits for our Users
• Intuitive usage, almost no training needed
• Reduction of errors
• Increased productivity
• Increased joy of use

More Information

Pattern-Based Design
Navigation Paradigm
Pattern-Based Design

Fundamentals and Background > Pattern-Based Design

Page Content
Background
Shell
Floorplan: Definition
Floorplan: Composition
Floorplan: Constituting Patterns and Content Area Patterns
Floorplan: Types
Floorplan: Screen Size

Guidelines for UI Development
Starting from FP4.5 the default screen resolution will change from 1024x768 pixel to 1280x1024 pixel.

Background

The usage of UI design patterns for the construction of a graphical user interface is not a new idea. Since Christopher Alexander (1977) described recurring patterns in architectural operations, this type of patterns has been transferred to the world of computing as well.

SAP started developing its own model of UI design patterns in 2001. In this approach the user as an information worker is placed in the center of all activities. Data entry work is reduced to a minimum and the main goal is to allow for control and supervision of the process flow.

The generic UI pattern model developed by Arend, Eberleh, Willumeit (2003) is twofold (see picture, model adapted to ByD):

- On the left side you find the Work Decomposition hierarchy (independent of a concrete UI paradigm).
- The right side shows the UI Decomposition hierarchy of implemented UI patterns.
- Generic task-based concepts of the left side are mapped to according UI patterns on the right side.

The advantages of pattern-based UI design are:

- Consistent look and feel by predefined pattern components
- Efficient application development by configuring the UI instead of individually programming it
- Improved quality of the product by using evaluated components
- Ability to change the UI centrally once for all business processes

**References**

**Patterns in Architecture:**
"A pattern is a collection of elements and their relationships which can be repetitively reached or used in analysis, design, development and use (of cooperative systems)."

**Patterns in UI Design:**
"Interface design patterns are solutions to frequently-occurring problems and situation in the design of interfaces."

**Patterns at SAP:**

**Shell**

The shell of ByDesign is a structured container for floorplans and patterns. The shell frames the ByD content area and allows for example to access Work Center views, Shortcuts, Common Tasks, and the Help Center.

**Navigation Area**

The Navigation Area provides navigation to all Work Center views and Work Center sub-views.
1. **Home**: Navigates to the Control Center Home for the general overview such as tasks, inbox entries and news across all Work Centers.
2. **Work Centers**: Navigates to Work Center views, their sub-views and Common Tasks. See Navigation in the Shell for detailed information.
3. **Work Center Menu**: Navigates to Work Center views and sub-views.

**Taskbar**

The Taskbar lets the user navigate to Shortcuts, the Enterprise Search and the Collaboration Window.
1. **Enterprise Search**: Opens the entry field of the Enterprise Search.
2. **Shortcuts**: Opens a list of user-selected shortcuts across work centers.
3. **Collaboration Window**: Opens the Collaboration Window.

**Infobar**

The Infobar is located at the right side of the screen and provides additional information such as Help Center, Shelf and Tags.

1. **Help Center**: Opens the Info Area with the Help Center for the current Work Center view.
2. **Shelf**: Opens the Info Area with favorites and flags.
3. **Tags**: Opens the Info Area where the user can view and edit tags for the current view.

**Navigation Bar**

The Navigation Bar is located at the lower part of the screen. The current Work Center and all screens are displayed as tabs in the Navigation bar.

**NOTE**: The Navigation Bar is only visible when the user enables tabbed navigation.
1. **Active Work Center**: Navigates to the current view of the active Work Center.
2. **Start Menu**: Shows all Work Center views and common tasks and allows searching for views and tasks.
3. **Screen**: Navigates to a screen such as a purchase order.

### Floorplan: Definition

**Example: Architecture**

A UI floorplan corresponds to the ground plan of a building. It is composed of UI patterns which correspond to the rooms of a ground plan. Some of the patterns define the floorplan type (called **Constituting UI Patterns**) like for example a corridor with its doors to rooms, other patterns fill the Content Area (called **Content Area Patterns**) like a sleeping room or kitchen depending on the purpose. Patterns are arranged spatially within a window (according to one floor of a building).

**Example: User Interface ByDesign**

The following picture shows the composition of a Quick Activity floorplan. The constituting UI patterns are the Identification Region and the Contextual Navigation. The content area patterns are Form Panes and a List Pane.
Implementation of a Floorplan - Hierarchy of UI Patterns

UI Patterns are implemented as software pieces. Patterns consist of Pattern Elements. Pattern Elements contain common controls of a graphical user interface. The reason behind is to reuse patterns and pattern elements in different floorplans.

Floorplan: Composition

We chose the Quick Activity floorplan as an example for explaining the composition principles.

Example: Quick Activity Floorplan
Patterns

The floorplan consists of the patterns List Pane, Identification Region, Form Pane.
Pattern Elements

Inside the patterns are pattern elements which serve certain tasks of the user such as selecting functions and reading data. Pattern elements are for example a table, a section group or a toolbar.
Controls

Pattern elements are composed in a defined way of UI controls such as fields, buttons, and labels.
Floorplans: Constituting Patterns and Content Area Patterns

Floorplans are composed of patterns in a well-defined way. We distinguish between:

- **Constituting patterns**: The pattern is called "region", is mandatory, is provided per floorplan type at a fixed position, and can not be changed. Examples are Identification Region, Message Region.
- **Content area patterns**: The pattern is placed into the content area. Examples are List Pane, Form Pane, Browse & Collect, Notes, Attachments.

For detailed information on floorplan composition see Composition of Floorplans.

Patterns of Control Center (Home) and Work Center Floorplans

1. **Title Bar**: Contains services like user information, personalization and help.
2. **Navigation Area**: Provides navigation to Work Center views, their sub-views and common tasks.
3. **Taskbar**: Provides quick access to Shortcuts, Collaboration Window, Enterprise Search.
4. **Infobar**: Provides access to Help Center, Shelf with flags and favorites and Tags.
5. **Navigation Bar**: The user can switch to an object by opening the specific tab. The navigation bar is only shown when tabbed navigation is enabled.
6. **Content area patterns**

**NOTE**: The grey patterns are the constituting patterns.
Patterns of Object Instances (OIF), Guided Activities (GAF), and Quick Activity Floorplans (QAF)

1. **Identification Region (IDR):** Contains the floorplan title and defining elements, see Identification Region.
   The IDR has the following areas:
   - The **basic area** includes the essential window identification, the floorplan title, and - if multi-window navigation is selected - the window title.
   - The **extended area** includes the context identification for the floorplan, identifying header information that is valid for the entire floorplan and exposed in a display-only presentation.
2. **Task Region:** Is only shown when tasks are associated.
3. For GAF only, a **Roadmap Region:** Displays a sequence of steps graphically with labels.
4. **Context Navigation Region (CNR):** Contains a toolbar and for OIF additional tabs.
   The CNR is a horizontal region that provides contextual navigation and actions based on the business object (BO) type.
5. **Message Region:** Is only shown when messages such as error or success messages are raised, see System Messages.
6. **Content area patterns**

**NOTE:** The grey patterns are the constituting patterns.

---

**Floorplan: Screen Size**

We assume a physical screen size of 1024 x 768 pixel (px) for designing our screens.
For Work Centers:

Assuming that the actual screen width is 1024 px, the available content area is approximately 944 px in width (Work Center OWL). Assuming that the actual screen height is 768 px, the available content area height is about 650 px (Work Center).

For application screens:

The horizontal borders left and right have a width of 32 px each. Assuming a screen width of 1024 px the remaining horizontal space is 880 px.

For vertical size, the upper border costs 16 px, the lower border 43 px which leaves a remaining horizontal space of 590 px.

The size of the content area is flexible and adopts to the screen resolution and to browser’s full screen mode.

To avoid horizontal scrolling these sizes imply to have a two column layout only for forms, and to limit the number of displayed columns for tables.

Vertical scrolling for longer content areas is acceptable.

NOTE: Until end of FP4.0 the screen resolution for ByD screens will remain 1024x768 px. From FP4.5 on the default screen resolution will be 1280x1024 px.

Floorplan: Types

Control Center - Home

The Control Center (CC) (Home):

- Gives the user central access to their working content through alerts, business object (BO) notifications, news, self-service information and applications, and reports. Key business information driven by analytical and operational triggers supports each user's goals and tasks across applications and work domains.
- Contains the following views: Overview, Work, News, Self-Services, and Reports.
- The user has the ability to personalize Home.

For more information see Control Center Home.
Work Center

Work Centers (WoC) have the following characteristics:

- **Overview** is the first view within a Work Center. It offers quick links to the according Work Center views and shows analytic information.
- Work Center specific views appear between the **Overview** and the **Reports** view. They typically display a list of business objects (BOs) such as purchase orders or opportunities.
- **Reports** is the last view within a work center.

For more information see **Work Center**.
Fact Sheet

The Fact Sheet (FS) provides a display-only overview of a business object (such as an employee, a purchase order, or a supplier).

For more information see Fact Sheet.

Object Instance Floorplan

The Object Instance Floorplan (OIF) allows users to create, view, and edit a business object. Typically, the OIF shows multiple tabs, whose content is determined by a defined business object type and the distinctive tasks a user has to perform with those.
Guided Activity Floorplan

The Guided Activity Floorplan (GAF) is a floorplan for an activity that can be divided in a logical sequence of steps. It consists of a series of screens that guide the user through an activity to achieve a specific goal. A roadmap provides a visual representation of the whole activity.

The last step in the sequence is mandatory and called Confirmation. It is launched after the user saved the data and contains a confirmation message.

The step before the Confirmation step can be a Review step. In the Review Step the most important data is displayed such that the user can check if data has been entered correctly.

For more information see Guided Activity.
Quick Activity Floorplan (QAF)

The Quick Activity Floorplan (QAF) allows the user to quickly perform a specific task. This can be self-contained or a short sub-task within the context of a larger task (for example a quick create). Therefore, a QAF is a simple task-specific alternative to a business object's OIF.

For more information see Quick Activity.

Modal Dialog Floorplan

Modal Dialogs (MD) are small movable and resizable windows that help the user to perform a task in the Control Center, WoCs, GAFs, OIFs or QAFs. A dialog must be associated with the calling window.

A dialog provides the following functions:
- Displays GAF, OIF, or QAF data overflow using a layout consisting of fields and their values (like the layout of a properties dialog)
- Displays an Object Value Selector (OVS) which helps the user selecting a value, see Object Value Selector
- Lets the user edit attributes/properties belonging to an object

For more information see Modal Dialog.

![Modal Dialog Example](image)

**More Information**

Control Center Home
Functions & Menus
Guided Activity
Modal Dialog
Object Instance
Quick Activity
Work Center
Navigation Paradigm

Fundamentals and Background > Navigation Paradigm

Page Content
Basic Navigation Concept
Navigation Concept: Standard Link Paths
Navigation: Push Principle (TOWL)
Navigation: Pull Principle (OWL)
Navigation: Pull Principle (OIF, QA, GAF)
Navigation in the Shell
Access to Work Center views, Common Tasks and Shortcuts
Navigation via Links and Buttons
Tabbed Navigation and Multi Window Navigation

Basic Navigation Concept

People work in multiple, parallel activity threads. Consequently, the navigation model is based on opening a new work space for each activity to allow rapid switching between parallel work activities. Depending on the user's preferred working style, a work space is

- either opened in a new window (multi-window navigation paradigm)
- or in a new tab (single-window navigation paradigm)

For how to select the preferred navigation paradigm, see Additional Personalization/Adaptation Features.

All work activities are started either from the Control Center (CC) or from Work Centers (WoC). The CC or the WoC are always available and function as a central reference point. From a CC or a WoC, application floorplans such as Fact Sheets (FS), Guided Activity Floorplans (GAFs), Object Instance Floorplans (OIFs), and Quick Activity Floorplans (QAFs) are opened in separate windows/tabs. In general, the navigation is either inplace or opens a new window/tab. When the same BO is affected by the navigation the content is replaced within the current window/tab. In all other cases a new window/tab is opened.

![Diagram of navigation](image)

Floorplan Navigation: Read-only or Editable

When it is assumed that the user is viewing data for reference or information only, floorplans should be read-only when opened. When the user needs to edit a business object or a task, floorplans should be editable when opened. In both cases, the floorplan is opened in a new window/tab.

From Fact Sheet to Editable Floorplan

When the user opens a Fact Sheet which is in display-only mode a navigation to an editable floorplan can be provided. This navigation is inplace.

From Read-Only OIF or QAF to Editable OIF or QAF

When the user opens an OIF or QAF floorplan in read-only mode a navigation to an editable version of this floorplan can be provided. This navigation is inplace.

Navigation Concept: Standard Link Paths

The following standard navigation paths are executed when clicking a link on a task or business object:
• From a task-based OWL (TOWL) to a task-execution floorplan (if the user clicks the task subject link).
  **NOTE:** The task-execution floorplan contains the task region which allows navigation to the task details.
• From a query-based OWL (containing a list of business objects) to a Fact Sheet (if the user clicks the link on the object).
• From the content area of a floorplan (QAF, GAF, OIF) to the Fact Sheet of a related object (if the user clicks the link on the object).

The following **exceptional navigation paths** can be used instead of standard navigation paths 2. and 3.: If there is clear evidence that the user has to edit an object directly, the editable floorplan is launched instead of the Fact Sheet. If no Fact Sheet is available, the read-only floorplan is launched from the OWL.

The following picture shows the standard path from a TOWL to a task execution floorplan:

The following picture shows the standard path from a query-based OWL to a Fact Sheet and from the Fact Sheet to the editable floorplan. It also shows the exceptional navigation from the OWL to an editable floorplan:

The following picture shows the standard path from an editable floorplan to a Fact Sheet and from the Fact Sheet to the editable floorplan. It also shows the exceptional navigation from the editable floorplan to another editable floorplan:

**Navigation: Push Principle (TOWL)**

Tasks are displayed in task-based OWLs (TOWLs). As the user does not need to search for tasks but they are pushed to them we speak of the navigation push principle.
1. The user can either click `Edit` or the task subject link to launch the task-execution floorplan. The task-execution plan provides all information necessary to solve the task. It is displayed in a new window/tab.

2. The user can click the task icon either from the TOWL or from the task-execution plan the user can click the task icon. It opens the task details screen in a new window/tab and shows information like task progress, notes, and attachments.

**Navigation: Pull Principle (OWL)**

The query-based OWL contains all business objects. The user can search, filter, and sort these lists to find the business object they need to work on. As the user needs to actively pull for the object, we speak of the navigation pull principle.
1. The user can click Edit to launch the editable floorplan of the business object. The floorplan is opened in a new window/tab.
2. The user can click the object's ID to launch the display-only Fact Sheet of the business object. The Fact Sheet is opened in a new window/tab.
3. On the Fact Sheet the user can click Edit to open an editable floorplan. This can either be a QAF or an OIF. The editable floorplan is opened inplace.
4. View All opens the complete business object (OIF).

**NOTE:** From an editable floorplan the user can navigate to the Fact Sheet of the object being edited by clicking Open Overview in the You Can Also menu.

**Navigation: Pull Principle (OIF, QAF, GAF, Fact Sheet)**

From an Object Instance, Quick Activity, Guided Activity or Fact Sheet the user can pull information of related business objects.
1. The user can click the link of a related object.  
   - The standard navigation is to its Fact Sheet. The Fact Sheet is opened in a new window/tab.  
   - In rare cases it may be required to navigate to the editable floorplan. The editable floorplan is opened in a new window/tab.

2. On the Fact Sheet of the related object the user can click *Edit* to open an editable floorplan. This can either be a QAF or an OIF. The editable floorplan is opened inplace.

3. *View All* opens the complete business object (OIF).

**Navigation in the Shell**

There are several possibilities to navigate in the ByDesign shell.
1. **Title Bar**: Allows navigation to personalization, SAP Store and logoff and shows user information.

2. **Navigation Area**: Contains Home and allows access to Work Center views, their sub-views and Common Tasks.

3. **Taskbar**: Allows navigation to Shortcuts, the Collaboration Window and the Enterprise Search.

4. **Infobar**: Opens the Info Area which contains the Help Center or the Shelf with flags and favorites or Tags.

5. **Navigation Bar**: Allows navigation between screens.

### Access to Work Center Views, Common Tasks and Shortcuts

There are the following possibilities to navigate to Work Center views, their sub-views, common tasks and shortcuts:

#### Access to Work Center Views
1. Click on a Work Center in the Navigation Area. The last Work Center view the user visited is shown.
2. Hover a Work Center in the Navigation Area. The list of views opens. The assigned common tasks are listed in the right column.
3. Click on the icon in the right corner of the Navigation Area. The list of Work Centers opens.
4. Click on the menu of the leftmost tab in the Navigation Bar. The list of Work Centers opens.
   • Clicking a Work Center name opens the last visited Work Center.
   • Hovering a Work Center name opens the list of sub-views of the chosen Work Center. The last visited view is highlighted by default.
   • Clicking on Search for Work Centers and Views opens an input field where the user can type in a Work Center or view name.
5. Click on the Shortcut icon in the Taskbar. The list of Shortcuts opens.
6. Hovering a sub-view or a common task which is not already a shortcut, the user can add the sub-view or common task to the Shortcuts menu.
7. Hovering a sub-view or a common task which is already a shortcut, the user can remove the sub-view or common task from the Shortcuts menu.
8. Click on an entry in the Infobar opens the Info Area. For more information see Help, Sticky Notes, Tags, Shelf.
   • Help Center opens the context-sensitive help and learning content.
   • Shelf opens the flags and the favorites.
   • Tags opens the tags.

Access to Common Tasks

Common tasks are accessed via hovering a Work Center in the Navigation Area and the Navigation Bar. The title is Common Tasks. For more information about common task entries see Common Tasks Menu.

Access to Shortcuts

Shortcuts allow users to quickly access their often used Work Center views and common tasks. The selection can contain shortcuts of different Work Centers. It is possible to add, rename or remove shortcuts.
1. Click the Shortcut icon in the Taskbar to access the shortcuts.
2. The title is Shortcuts
4. Right-click on a highlighted shortcut shows the context menu.
The user can rename, remove and change the shortcuts position in the menu.

**Navigation via Links and Buttons**

The main difference between navigation via hyperlinks and navigation via buttons is that links usually open floorplans to show object information (and thus focus on the object) whereas buttons open floorplans to work on objects or carry out an action immediately (and this focus on the function).

- **Hyperlinks** can be placed in table cells, forms, identification regions (IDR), and preview sections. Hyperlinks themselves convey already information to the user, like the ID of an object or the telephone number. Clicking a hyperlink opens a new floorplan window which shows additional information. This floorplan is usually read-only but can also be editable. Usually, hyperlinks within content patterns provide a direct navigation path to related information.

  **NOTE:** A special variant of hyperlinks is the You Can Also menu. Although they are visually represented as links they also focus on the function by providing direct access to floorplans which allow working on objects.

- **Buttons** like Save, Edit, New or Print are usually placed into a toolbar. Buttons like New can also be placed behind a field within a form and thus provide an alternative navigation path: The user does not need to navigate to the according Work Center where the objects are usually created.

**Tabbed Navigation and Multi Window Navigation**

SAP Business ByDesign follows the principle that every activity is either started from Home or a Work Center. All activities are either opened in a new window or in a new tab depending on the user's personalized settings.

**Multi Window Navigation**

The Control Center or Work Center is the anchor window. All activities started from this window are opened in new windows from where you can start other activities in new windows.

**Tabbed Navigation**

Since internet browsers introduced tabbed navigation SAP Business ByDesign offers this feature as well. The anchor tab is the Work Center or Control Center on the left side. All activities are opened in new tabs shown in the lower part of the ByDesign screen.
Keyboard Navigation

Fundamentals and Background > Keyboard Navigation

Page Content

Keyboard Navigation: Definition
Tab Chain
Accelerator Keys and Hot Keys

Guidelines for UI Development
Accelarator keys are not available with FP3.5.

Keyboard Navigation: Definition

Keyboard Navigation allows the user to perform actions via keys or key combinations and navigate between UI elements via the TAB key instead of using a mouse.

Tab Chain

Element navigation moves the focus sequentially from one UI element to the next along a predefined route. This route is called tab order or tab chain because pressing the TAB key moves the focus forward in the chain. Pressing SHIFT + TAB moves the focus back along the tab chain to the previous UI element.

The tab order is circular: If the focus is on the last UI element of the screen pressing TAB moves the focus to the first element. If the focus is on the first UI element pressing SHIFT + TAB moves the focus to the last element.

NOTE: The tab chain is always defined for a whole screen. If the tab order is specified for parts of the screen only, for example a list pane, and the focus is on the last UI element, pressing TAB moves the focus to the first element of the next part of the screen.

Concept and Background

The keyboard navigation is designed among other according to the principles and rules of Gestalt-Psychology. The rule of proximity indicates that visual elements located in proximity of each other are perceived as belonging together. This principle in page design creates a more harmonious appearance with increased readability and ability to scan pages more quickly.

The picture shows a simple example of the rule of proximity:

The tab chain follows vertical inside section groups, in a newspaper layout. This provides a high accessibility: A consistent tabbing order is important for easy use by customers who have to rely on the keyboard or other entry mechanisms due to a physical handicap and it a clear advantage for power users who tend to use quicker keyboard commands.

Keeping related items close together in section groups enables users to take in information quicker.

In SAP Business ByDesign the navigation is in a vertical order, as indicated in the figure on the right hand side. The tab chain moves
vertically downwards in the left column. After the last element the cursor jumps to the top of the right column. You can find more details in newspaper layout.

**Newspaper Layout**

**Recommended Format**
This format is recommended for most forms as they usually consist of several section groups only.
Follow these rules to achieve a "Newspaper" layout:

- Use two form panes (shaded in the graphic to the right) each spreading one column vertically, see Form Pane.
- Arrange section groups (marked white in the graphic to the right) vertically within each form pane.
- Within each section group arrange fields in one column only.

**Alternative Format for large Forms with many Section Groups**
This format can be used when it is required to have different independent parts each consisting of several section groups on a screen. The section groups (marked white in the graphic on the right) are arranged in forms spreading two columns (shaded in the graphic on the right). The tab moves through all section groups within one form first and from form to form second.
Jumps between Form Panes

Between form panes the tab navigation works as follows:
Special Cases

Tables and Form Panes can be combined as shown in the following picture.

NOTE: You can leave the table and switch to the subsequent form pane using CTRL+TAB.
Accelerator Keys and Hot Keys

Accelerator Keys

Accelerator keys (also called access keys or shortcut keys) are keys that enable the user to navigate directly to certain areas or fields instead of tabbing through every element in the tab chain.

Each accelerator key has the following characteristics:

- A label is assigned to buttons, labels, and tabs.
- The label shows one character underlined and indicates the accelerator key.
- In order to navigate press the ALT key first and second the accelerator key.
- Pressing the accelerator key does only change the focus. If you navigate to a button, no action is carried out.
- If a UI element is disabled its accelerator key is also disabled.
- Accelerator keys only work inside the current window/UI layer. For example, accelerator keys for a context menu work only while the menu is open.
- Accelerator keys are independent of the SHIFT key. For example pressing ALT + D has the same effect as ALT + SHIFT + D.
- Number keys (0 to 9) are allowed as accelerator keys.
- Pressing the accelerator key while the ALT key is pressed immediately changes the focus.

Duplicate Accelerator Keys

Duplicate accelerator keys are allowed. If the same accelerator key is assigned to different UI elements, pressing the key cycles the focus from one element to the next using the order of the tab chain.

Hot Keys

The following hot keys are provided for ByD. The Microsoft Internet Explorer requires some special Hot Keys, mentioned in the third column:

<table>
<thead>
<tr>
<th>Function</th>
<th>Hot Key</th>
<th>Hot Key for MS Internet Explorer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Save and Close</td>
<td>CTRL + W</td>
<td>CTRL + ALT + W</td>
</tr>
<tr>
<td>Save</td>
<td>CTRL + S</td>
<td>CTRL + ALT + S</td>
</tr>
<tr>
<td>Close</td>
<td>CTRL + Q</td>
<td>Not available</td>
</tr>
<tr>
<td>Refresh</td>
<td>CTRL + R</td>
<td>CTRL + ALT + R</td>
</tr>
<tr>
<td>Basic / Advanced Find</td>
<td>CTRL + G</td>
<td>CTRL + ALT + G</td>
</tr>
<tr>
<td>Filter</td>
<td>CTRL + H</td>
<td>CTRL + ALT + H</td>
</tr>
<tr>
<td>Add row</td>
<td>CTRL + INSERT</td>
<td>Not available</td>
</tr>
<tr>
<td>Delete row</td>
<td>CTRL + DELETE</td>
<td>Not available</td>
</tr>
<tr>
<td>Expand (Hierarchy)</td>
<td>CTRL + +</td>
<td>CTRL + ALT + +</td>
</tr>
<tr>
<td>Collapse (Hierarchy)</td>
<td>CTRL + -</td>
<td>CTRL + ALT + -</td>
</tr>
<tr>
<td>View All</td>
<td>SHIFT + CTRL + A</td>
<td>Not available</td>
</tr>
<tr>
<td>Log Off</td>
<td>SHIFT + CTRL + Q</td>
<td>Not available</td>
</tr>
<tr>
<td>Open navigation menu (bottom left)</td>
<td>WIN + S</td>
<td>WIN + S</td>
</tr>
</tbody>
</table>

More Information

Navigation Paradigm
Tooltips for Generic Functions
Secondary Help "Keyboard Navigation"
Analytics

Fundamentals and Background > Analytics

Page Content
Definition: Analytics
Interaction between Information Consumer and Analysis Pattern
Excel Reports
Formatted Reports

Definition: Analytics

Analytics provides the necessary infrastructure for the analysis of an enterprise. In addition, a set of predefined reports from all business areas is available that cover the most important reporting needs. The reports allow an easy adoption to personal preferences.

In ByD the following patterns are available:

- **Information Consumer Pattern (ICP)**
  ICPs visualize data in a compact way as a chart or a table and are embedded in Work Center views as well as in other floorplans, see Information Consumer Pattern.

- **Analysis Pattern (AP)**
  APs visualize data in an extended way as a chart or a table and cover a complete screen, see Analysis Pattern.

- **Quick Filter (QF)**
  QFs visualize data in an enhanced way as a chart or a table and cover a complete screen, see Quick Filter.

Besides ICPs, QFs and APs the following UIs are available for viewing and editing reports:

- Excel reports (see Excel Styles for the allowed colors and fonts)
- Formatted reports

Interaction between Information Consumer and Analysis Pattern

The navigation is as follows:

- The user can navigate from an ICP to the AP or QF via Actions --> View Details and dive into the advanced analysis. The specific AP or QF opens in a new window or a new tab depending on the user's settings.
- The user can create a new user-defined view and/or variables.
- After saving, the new view and/or variables appear in Show dropdown listbox of the ICP:
  - The view is only available for this ICP
  - It is only available for the user who created the view.
  - The view can only be deleted by the user who created it.

Excel Reports

Excel reports can be created and saved via the ByD Excel Add-In. The user has the option to open a report as a browser-based report (using the Analysis Pattern) or as an Excel report in the Reports view. In Excel all standard Excel functions can be used.

Additionally, the users can create their personal Excel workbooks and make them available in the Reports view of Home, see Reports.
Formatted Reports

Formatted reports are displayed like crystal reports. Only the key user can create formatted reports.
Cost Center - Plan/Actual - Print Layout

More Information

Analysis Pattern
Information Consumer Pattern
Quick Filter
Business Task Management

Fundamentals and Background > Business Task Management

Definition: Business Task Management

Business Task Management (BTM) is the ByD infrastructure used to address tasks to end users. It enables users to receive, manage, and complete tasks in an easy and timely way by configuring tasks with a built-in timeframe and escalation mechanism. BTM ensures flexible workload distribution. Tasks created by the system are assigned to the appropriate users or organizational units and displayed in their worklists. BTM prioritizes tasks within a worklist, giving users clear guidance on their daily work on which task should be completed first.

BTM is collaborative, providing users with the ability to follow up on tasks in collaboration with other users. This is achieved by providing users with the option to ask another colleague for clarification on a task or business object, or to forward the task to another user if necessary.

Worklists

The following worklists are available:

- **Task-based OWLs** (TOWL) within Work Center views
  Contains all open tasks within the respective business context of the work center view, see Consistency Rules: TOWL Placement.
- **Inbox** within the Control Center
  Contains all alerts, notifications, and clarification requests as well as tasks which are not assigned to TOWLS, see Work: Inbox and Delegated Tasks.
- **Delegated Tasks** within the Control Center
  Allows tracking of all manually created and forwarded tasks.
- **Approvals task list** in the Managing My Area work center
  Contains all approval tasks a manager is responsible for such as approve leave requests, see Approvals View.
- **Application and User Management** Work Center
  Contains monitoring tools for the key user such as all tasks monitor, unassigned items monitor, automated tasks with errors.

From the worklists the users can carry out tasks, set them to complete, forward, change the priority of, and put back a task. They can also create new tasks, notifications, alerts, and clarification requests.

Task-Execution Floorplans and Task Region

Task-Execution Floorplan

Users deal with their tasks on task-execution floorplans. The floorplan is either designed especially for this task or is the general floorplan of the respective business object. A task-execution floorplan is usually launched from a worklist by clicking the task subject and is always editable.

Task Region

Whenever a task is assigned to a business object its floorplan shows the Task Region. The Task Region is a constituting UI pattern in activity floorplans, see Floorplans: Constituting Patterns and Content Area Patterns.

From the Task Region the user can:

- Navigate to the task details floorplan that allows access to the generic BTM actions.
- Switch between task-execution floorplans if more than one task needs to be carried out for a business object.

Example
Generic BTM Actions and Floorplans

The following actions are available for manual task creation:

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Alert</td>
<td>Opens a QAF. The user can create an alert for another user. These are tasks with the highest priority pointing to an exceptional situation requiring immediate action.</td>
</tr>
<tr>
<td>New Clarification Request</td>
<td>Opens a QAF. The user can ask another user for further information on a task or a business object. The recipient of the clarification request can reply.</td>
</tr>
<tr>
<td>New Notification</td>
<td>Opens a QAF. The user can create a notification for another user. These are informative items that typically require no action.</td>
</tr>
<tr>
<td>New Task</td>
<td>Opens a QAF. The user can create a task for another user.</td>
</tr>
</tbody>
</table>

The user can carry out the following generic actions on tasks:

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledge</td>
<td>Only for notifications. Indicates that the notification is read.</td>
</tr>
<tr>
<td>Add / Show Attachments</td>
<td>Opens a QAF. The user can create attachments from scratch (Add) or add and display attachments (Show).</td>
</tr>
<tr>
<td>Add / Show Notes</td>
<td>Opens a QAF. The user can create notes from scratch (Add) or add and display notes (Show).</td>
</tr>
<tr>
<td>Cancel</td>
<td>Optional, depends on the design of the task type. Sets the task status to Canceled.</td>
</tr>
<tr>
<td>Change Priority</td>
<td>Opens a modal dialog. The user can change the priority between low and very high.</td>
</tr>
<tr>
<td>Complete</td>
<td>Sets the task status to Completed.</td>
</tr>
<tr>
<td>Forward</td>
<td>Opens a QAF. The user can handover the task to another user.</td>
</tr>
<tr>
<td>Open Details</td>
<td>Opens a QAF that displays processor, priority, status, progress, notes and attachments.</td>
</tr>
</tbody>
</table>
Collaboration Window

Alerts are delivered from the application to the users' desktop, even when they are working outside of the application environment. This means that the user receives a pop-up from which the corresponding task execution floorplan can be launched. If the user misses a pop-up they can find their missed tasks in the collaboration window.

Examples

The following screenshots are taken from an FP3.5 ByD system:

New Alert

![New Alert screenshot](image1)

New Clarification Request

![New Clarification Request screenshot](image2)
New Notification

New Task

More Information

Action Navigation
Approvals View
Collaboration Window
Consistency Rules: TOWL Placement
Functions & Menus
Navigation Paradigm
Collaboration Window

Definition: Collaboration Window

The Collaboration Window (CW) is a desktop tool that allows you to instantly contact business partners such as customers, suppliers, and colleagues, through a variety of communication channels, including telephony, and e-mail.

For interactions such as incoming telephone calls, the collaboration window provides contextual information and business-relevant navigation.

BTM alerts are delivered from the application to the users' desktop, even when they are working outside of the application environment. This means that the user receives a pop-up from which the corresponding task execution floorplan can be launched.

Layout

The CW consists of the following elements:

1. Action Bar:
   - *Menu*: Provides basic settings for the CW and shows general information.
   - *Home icon*: Navigates to the Home screen, see Control Center Home.
   - *Input fields and icon for Enterprise Search*: Opens the Enterprise Search and shows the results on the Enterprise Search page but not in the CW.

2. Tab Bar:
   - *Missed Items*:
Lists all BTM alerts to which the user did not respond, this means that the user did not execute any action on the incoming BTM pop-up. It also includes the missed and rejected calls. The latest missed items are displayed first.

- **Contacts:**
  - Contacts are internal (colleagues) or external (suppliers, customers) business partners. On the Contacts page the users can:
    - Manage their contacts, for example add and remove contacts or create contact lists
    - Collaborate with their contacts, for example send e-mails and meeting requests, give them a call or share applications

- **Business Context:**
  - Is used to show contextual information of a business partner and to carry out actions with regards to that business partner. If the user accepts an incoming call, the calling business partner is automatically shown on this page.
  - **Printing:** Lets the user monitor the print documents from the ByDesign system for which he is responsible. The user can view his print jobs and the associated messages. See Backend Printing.

3. Content Area
4. Telephony Area which is only shown if the telephony application is integrated. With the telephony integration the users can, for example, initiate, hang-up, hold, transfer or resume calls.

### Example

The following screenshot is taken from an FP3.5 ByD system:

![SAP Collaboration Window](image)

### More Information

- Backend Printing
- Control Center Home
- Enterprise Search
Control Center Home

Fundamentals and Background > Control Center Home

Page Content
Definition: Control Center
Control Center Views
Examples

Definition: Control Center

The Control Center (CC), called Home on the UI, consists of a set of views that organizes the user’s activities across work centers and beyond roles. The Control Center aggregates, summarizes, and provides all information the users need for their daily work, including:

- Tasks, alerts, notifications, clarifications
- Company news and RSS (Really Simple Syndication) feeds. The user can subscribe to feeds. The ByD news reader checks the user's subscribed feeds regularly for updates and provides a user interface to monitor and read the feeds.
- Self-Services like create a leave request
- Reports
- Common Tasks

The user can personalize several views as well as Quick Links, News, and Information Consumer Patterns (ICPs). When personalizing Home, the user can select from the list of all common tasks of all Work Centers he or she is assigned to, the ones that should be accessible from Home.

Control Center Views

The following views and sub-views are available:

1. Overview: Provides an overview of the user’s work
2. Work:
   - Inbox: Displays Business Task Management (BTM) items which are not delivered to the Work Center’s task-based Object Work Lists (TOWL).
   - Delegated Tasks: Allows to track the tasks assigned to the user as well as the tasks the user forwarded to other users.
   - Workload Overview: Provides a snapshot of the user's current workload and monitors the status of work assigned to the user across all Work Centers and the Control Center. When the user enters this page all information is updated. The
overview offers quick links to Work Center OWLs the user is assigned to.

- **Manual Print Tasks**: Contains all documents the user needs to print manually.

3. **News**: Displays news coming from internal and external RSS feeds. The users can personalize Latest News in the Overview. Key users can push news to users of different WoCs via the news authoring view (available in the Application & User Management WoC). The content is shown in a hierarchical structure and can include the following:
   - News from SAP (SAP Hosting news, news feed from SAP about products, ByD system news and services concerning ByD)
   - News relevant to Work Centers (added by key users, both internal company news and news from external RSS feeds)
   - News from external RSS feeds (added by end users)

4. **Self-Service**:
   - **Self-Service Overview**: Provides central access to all Employee Self-Services (ESS), including submission of a leave request or updating personal information. The content is shown in a service map. For more information see Service Map.
   - **My Requests**: Summarizes user requests such as leave requests, expense reports, incidents or shopping carts.
   - **Learning Center**: Shows all learning modules that are available for the Work Centers the user is assigned to.

5. **Reports**:
   - **List**: Provides central access to all reports from all WoC assigned to the user. The reports in the Control Center differ from the reports in the Work Centers in one way: On the Control Center an additional function is available, Excel Workbook™ that allows the user to create the report as an excel workbook using a Microsoft Excel add-in. For more information see Consistency Rules: Reports View.
   - **Gallery**: Alternative visualization of the reports list.

**NOTE**
The display in the Workload Overview is limited:

- Maximum number of Work Centers to be displayed is 3.
- Maximum number of Object Worklists (OWLs) per Work Center is 4.
- Number of queries per OWL is unlimited.

**Examples**

The following screenshots are taken from an FP3.5 ByD system:

**Overview**:

**Inbox**:
Workload Overview:

Sales Orders
- Open Tasks (130)
- Completed Tasks (130)
- My Open Orders (5)
- My Team's Open Orders (5)
- Open Work Items (2)

Compensation
- Work: Open Tasks (130)
- Compensation Structures: All (5)
- Compensation Components: All Active (550)
- Employees: Active Employees (799)

Personal Administration
- Work: Open Tasks (130)
- Authorizations: Social Insurance
- Employees: With the Employees (582)

News:
**Self-Service Overview:**

- **Company Address Book**: Search for employees, view information about your colleagues, and their contact details.
- **My Requests**: View and track your leave requests, expense reports, incidents, and shopping carts.
- **Time**: Create and track your leave requests, record your working time, view your absence and time accounts.
- **Expenses**: Manage all information related to expense reimbursement.
- **Compensation**: Manage issues related to salary, such as payment method, bank information, and salary deductions.

**Service and Support**: Consult the community, report and track your incidents.
- **Track My Incidents**: Consult SAP Business ByDesign Community.
- **Leave Incident**: View and manage your leave incidents.
- **My Leave Requests**: Track your leave requests.
- **Year Leave Totals**: View your leave totals.
- **View Allocations**: View your time allocations.
- **Year Time Allocations Overview**: Edit your time overview.
- **Edit Subordinates**: Edit your subordinates.
- **Expenses**: Manage all information related to expense reimbursement.
- **Track My Customer Reports**: Track your customer reports.
- **View Expense Report**: View your expense report.
- **Edit Reimbursement Settings**: Edit your reimbursement settings.
- **Compensation**: Manage issues related to salary, such as payment method, bank information, and salary deductions.

**Shopping**: Create and track your shopping carts.
- **Track My Shopping Carts**: Track your shopping carts.
- **Custom Shopping Carts**: Create custom shopping carts.
- **On Shopping**: View your shopping cart.
- **Shopping View**: View your shopping cart.

**Personal Information**: View and update your contact data and personal details.
- **Edit Employee Data**: Edit your employee data.
- **Edit Personal Contact Data**: Edit your personal contact data.

**Learning Center**: Access your personalized learning modules and track your learning progress.
- **Access My Learning Center**: Access your learning center.
- **Play Catalog**: Play the catalog.
- **My Computer**: Check your computer settings and install additional software.
- **Install Additional Software**: Install additional software.
- **Check My Computer Settings**: Check your computer settings.

**Learning Center:**
### More Information

- Analytics
- Business Task Management
- Collaboration Window
- Enterprise Search
- Personalization and Adaptation
- Service Map
**Definition: Document Center**

The **Document Center (DC)** is a dedicated Work Center view for the storage of business related documents. It allows users to easily retrieve files, or upload and maintain documents. It is basically used to store unstructured content. In contrast to attachments, files uploaded within the document center are not assigned to any business object. The document center does not support any folders.

**Consistency Rules**

1. **Show**: Contains the following entries in the given order:
   - Documents Created By Me
   - Documents Changed By Me
   - Documents Recently Changed By Me
   - Documents Checked Out By Me
   - Recently Changed Documents
   - New Documents
   - All Documents

2. **Group By**: Contains the following entries in the given order:
   - None
   - Document Name
   - Type
   - Changed By
   - Locked

3. **Buttons**:
   - **View**: Opens the document in a new window, using the application the document has been created, for example Word or Excel
   - **New**: Opens a Modal Dialog which allows the user to enter the document's properties and to upload the document
   - **Delete**: Deletes the document from the database
   - **View Properties**: Opens a Modal Dialog showing the document's properties
   - **Edit Properties**: Opens a Modal Dialog for editing the document's properties
4. **Details**: Use the section groups and labels as shown in the picture.

---

**Examples**

The following screenshots are taken from a ByD FP3.5 system.

**Document OIF:**

![Document OIF screenshot](image)

**Create Document:**

![Create Document screenshot](image)
Edit Document Properties:

More Information

Attachments
Notes
Enterprise Search

Fundamentals and Background > Enterprise Search

Page Content
Definition: Enterprise Search
Searching ByD Categories and the Web
Search Results
Examples

Definition: Enterprise Search

Enterprise Search (ES) lets the user find and navigate to the following categories:

- Files: MIME-type files (documents, spreadsheets, presentations, PDF files)
- People: Employees, business partners such as customers and suppliers, other people
  - A link on a person's name opens the address book
  - A link on a business partner’s name opens a Fact Sheet
  - In a Human Capital Management (HCM) or line management context, a link on an employee’s name opens the employee Fact Sheet
- Reports: Analysis Patterns (analytical reports, formatted reports, list reports)
- Business Objects: Enterprise Services Infrastructure (ESI) BOs (contracts, sales orders, opportunities, etc.)
- External Web Services: Search information in external web sites

Enterprise Search is an alternative method of navigating to information besides the primary method of navigating to information via Control Center and Work Centers.

Searching ByD Categories and the Web

1. The user can enter a search string in the Search field. Before starting the search it is possible to select the category for the search. In the categories below the horizontal line the user is enabled to search in sites of the internet.
   The user can search in the following ByD categories:
   - All Categories
   - Analytics
   - Address Book
   - Business Data
   - <Web Search 1>
   - <Web Search 2>
   - <...>
   - <Web Search n>

   2. The magnifier icon starts the search in the selected category and opens the results screen which inherits the search string and the chosen category.

The Search screen is displayed in basic mode. Advanced in the upper right hand corner of the screen opens detailed search options.

Search Result

The result screens for ByD category search and external web search are different.
Enterprise Search Result for ByD Categories

Example:

On the result screen for ByD categories the user can narrow down the results and define how the results are shown (via Sort By, Sort Order, and Results Per Page).

1. The narrow down area allows to modify the search result.

- By clicking a category:

- By selecting a subcategory from the context menu next to the category:

- At business object level no context menu is available, the user can only navigate via the link to all business objects of the selected type. A breadcrumb shows the narrow down path. The user can navigate to upper categories by clicking the respective link in the breadcrumb.

- When navigating to the business objects their attributes are shown as text only. The context menu shows all values of the attribute:
At the last level the selected attribute value is shown, no narrow down area is available:

Example:
The following screenshot is taken from an FP3.0 ByD system:

2. The paging area allows to navigate between the search result pages. *Previous, First Page* and *Next* change between text and link depending on the context. For example, if the user displays the first page, *Previous* and *First* are texts.

- "..." indicates that more result pages are available
- The paging area can show five pages at most:

```
Previous  |  First Page  |  ...  2  3  4  5  <Curr. Page>...  |  Next
```

**NOTE:** If the search result does not fit on the screen, a scrollbar will be available. It scrolls the whole window and not in the result area which avoids having two scrollbars.

**Examples**

**Internal Enterprise Search Result**

The following screenshot is taken from an FP3.0 ByD system:
Enterprise Search Result for external Websites

When searching external websites they are shown in a new browser window:

More Information

Find Form
Sticky Notes

Sticky Notes allow the user to add own notes and comments to a business object (BO) which uses the sticky notes architecture. Sticky notes can either be private or public.

Info Area: Help, Shelf and Tags

Help Center, Tags and the Shelf with Flags and Favorites are elements of the info area, which can be opened from the Infobar.

NOTE: The Shelf with Flags and Favorites and the Tags are only enabled on Business Objects using the sticky notes architecture.
1. **Infobar**: A click on an item of the Infobar (such as Help Center, Shelf or Tags) opens the item in the info area.
2. **Info Area**: The info area opens from the right hand side of the screen between Infobar and content area. The info area is context-independent from the active Work Center.
3. **Content Area**: When opening the info area, the content area is dynamically resized to make room for the info area. The user can adjust the right border of the content area which directly affects the width of the info area.
4. **Close Icon**: Closes the info area and restores the size of the content area.

**Tags**

Tags are keywords that allow the user to categorize and search for business objects. Tags can be viewed in the info area as a list and as a cloud view. A click on a tag opens the Enterprise Search which finds the business objects this tag is assigned to.
1. **Search Field**: The user can enter a search string (without spaces) to search for existing tags. The search shows all tags containing the entered text.

2. **Tabs**: The tabs organize the tags for the user.
   - **My Tags**: Shows tags the user entered.
   - **Recent**: Shows tags that were recently used to tag business objects. In the table view this list is sorted chronologically so that the tags that were used most recently appear at the top of the list.
   - **All**: Shows all tags in the ByDesign system.

3. **Toolbar**: Lets the user switch between table view and cloud view.

4. **Content Area**: Depending on the user's selection in the toolbar the tags are shown in a tag cloud or in a table. Each tag in both views has a link to the result list of the [Enterprise Search](#). The table in the table view has two columns:
   - **Tag**: Shows the tag name.
   - **Uses**: Shows the number of business objects tagged with this tag.

### Assigning Tags to Business Objects

1. **Identification Region (IDR)**: Tags assigned to the Business Object are visible in the IDR.
2. **Tag Icon:** A highlighted tag icon indicates that tags are assigned to the Business Object – a grey tag icon means that no tag is assigned. A click on the tags icon opens the Assigned Tags dialog.

3. **Assigned Tags Dialog:** The user can assign tags to the BO or remove assigned tags from the Business Object. The already assigned tags are displayed underneath the title bar. To assign a tag to the BO the user types in a keyword in the input field where the suggest feature offers a list of existing tags. Clicking the **Add** button assigns the new tag.

4. **Info Area:** Once a tag is created it appears in the info area in the tag cloud or tag table.

---

**Shelf with Flags and Favorites**

The **Shelf** is opened from the infobar and contains flags and favorites the user set for business objects (BO). Flags mark BOs for a later reference, favorites mark BOs used frequently.

<table>
<thead>
<tr>
<th>All</th>
<th>Flags</th>
<th>Favorites</th>
</tr>
</thead>
<tbody>
<tr>
<td>BO1</td>
<td><img src="flag.png" alt="Flag" /></td>
<td><img src="favorite.png" alt="Favorite" /></td>
</tr>
<tr>
<td>BO2</td>
<td><img src="flag.png" alt="Flag" /></td>
<td></td>
</tr>
<tr>
<td>BO3</td>
<td><img src="flag.png" alt="Flag" /></td>
<td><img src="favorite.png" alt="Favorite" /></td>
</tr>
<tr>
<td>BO4</td>
<td><img src="flag.png" alt="Flag" /></td>
<td></td>
</tr>
<tr>
<td>BO5</td>
<td><img src="flag.png" alt="Flag" /></td>
<td></td>
</tr>
<tr>
<td>BO6</td>
<td><img src="flag.png" alt="Flag" /></td>
<td></td>
</tr>
<tr>
<td>BO7</td>
<td><img src="flag.png" alt="Flag" /></td>
<td></td>
</tr>
<tr>
<td>BO8</td>
<td><img src="flag.png" alt="Flag" /></td>
<td></td>
</tr>
</tbody>
</table>

- **Tabs:** The tabs show either flags or favorites or both.
  - **All:** Shows all business objects marked with a flag or a favorite.
  - **Flags:** Shows all business objects set with a flag.
  - **Favorites:** Shows all business objects set as favorite.

- **Business Objects Column:** Shows the BO type as a link. Clicking on a BO name opens the business object.

- **Flag / Favorite Column:** A small flag indicates that the BO is flagged. A small star indicates that the BO is set as a favorite. If a BO is flagged and set as favorite both icons are shown in the **All** tab.

---

**Flagging and Setting BOs to Favorites**

<table>
<thead>
<tr>
<th>BO Title</th>
<th>Flags</th>
<th>Favorites</th>
</tr>
</thead>
<tbody>
<tr>
<td>BO1</td>
<td><img src="flag.png" alt="Flag" /></td>
<td><img src="favorite.png" alt="Favorite" /></td>
</tr>
<tr>
<td>BO2</td>
<td><img src="flag.png" alt="Flag" /></td>
<td></td>
</tr>
</tbody>
</table>

1. **Flags:** Clicking the **Flag** icon flags the business object and a second click removes the flag.

2. **Favorites:** Clicking the **Favorite** icon sets the BO as a favorite and a second click removes the BO from the favorites.
Help Center

The Help Center (HC) is an area that can be called up from within any application to display context-sensitive help and learning content. It provides the user with the following information:

- Help Resources
- My Help Notes
- Links to contact support, to open the Learning Center and others

The Help Center consists of the following areas:

1. **Search area:**
   - Goggle-like search: Enables the user to search for documentation and learning content. The search result is displayed in the HC area.
   - Advanced search: Offers boolean operators to create more accurate search results.
   - Glossary search: Enables the user to search in the glossary.
2. **Help Resources:** Offers links to documentation provided by SAP and the customer. Key users can also access the ByD community on the Business Center.
3. **My Help Notes:** Allows the user to manage their personal notes such as create, edit, and delete notes. Notes are context-sensitive and only visible to the user who created them.
4. **You Can Also:** Offers links such as contact support or open learning center.

Examples

**Flags and Favorites**
The following screenshot is taken from an FP3.5 ByD System.
Tags
The following screenshot is taken from an FP3.5 ByD System.

More Information
Accelerator Keys and Hot Keys
Navigation in the Shell
Personalization and Adaptation
Primary Help
Shell
Value Help
Office Integration

Fundamentals and Background > Office Integration

Page Content
Definition: Office Integration
Export to Office Applications
Import from Office Applications
Microsoft Outlook® Integration

Guidelines for UI Development
With FP3.5 it is not possible to export data into Adobe PDF®.
It is also not possible to remove the Export menu if only one entry is available.

Definition: Office Integration

Office Integration enables users to work in their known office environment, for example Microsoft Office®. They can download table content into Microsoft Excel® or Adobe PDF®. The content is either downloaded for viewing or for editing. The user can also create new content in Microsoft Excel and upload it into ByD. Users can also exchange information between Microsoft Outlook and the ByD system, for example synchronizing emails, appointments, and tasks.

Export to Office Applications

Table content, usually Object Worklists (OWLs), can be exported to Microsoft Excel or Adobe PDF. All table columns including the hidden ones are exported. It is a precondition that export templates are defined in the Work Center Application and User Management. The following types of export templates exist:

- **Export only**: The user can view the table data and apply the native functions of the Office application, for example print. If the user changes any data in the office applications the data can **not** be saved in ByD.
- **Export, change data, and save** (not possible for Adobe PDF): The user can change the data in Microsoft Excel and save the changes in ByD.

Export Button in OWLs

Use the Export menu button with the mandatory entry To Microsoft Excel. If one template is available the windows standard download screen appears. If more than one template is defined, a dialog window is launched and the user can select the respective template.

- If the Export menu button contains only one entry, the menu is removed, see Menu Buttons.
- Place the Export button after the New button or - if available - after the Preview button, see also Consistency Rules: OWL.

Export, Change, Refresh, and Save

Data are exported into Microsoft Excel using a template for the export. In Excel the data can be viewed or modified. The modified information can be imported into ByDesign.

The export template contains an add-in with ByD functions such as:

- **Save Data to**: Saves data in ByD
- **Refresh**: Gets the latest data from ByD. The current data in the Excel sheet is overwritten with the latest ByD data.

Import from Office Applications

For importing new data into ByD import templates need to be defined in the Work Center Application and User Management. The applications decide whether import templates are provided.
Put the import function under the New menu button.
Name it <Business Object> from Microsoft Excel, for example Activities from Microsoft Excel.

Microsoft Outlook Integration

As an example, the ByD Customer Relationship Management (CRM) uses Microsoft Outlook integration to synchronize e-mails, appointments and tasks and to download relevant account and customer information to Outlook. Additionally, the users can create follow-up service requests directly in Microsoft Outlook out of incoming emails. They can also associate e-mails, tasks and appointments with ByD campaigns or opportunities.

The add-in toolbar for the CRM use case looks as follows:

The user can, for example:

- **Add E-Mails**: Synchronizes the selected e-mails with ByD
- **Follow-Up Service Request**: Creates a service request for the selected e-mails

More Information

Object Worklist
Personalization and Adaptation

Fundamentals and Background > Personalization

Page Content
Definition: Personalization/Adaptation
Personalize/Adapt via Side Panel
Additional Personalization Features
Examples (Side Panel)

Definition: Personalization/Adaptation

Personalization is the adjustment of software by the end user to meet the user's specific working style. Users can, for example, personalize which content is shown on the Home page, adjust the sequence of their Work Centers, and show and hide fields in forms and tables.

Adaptation is the adjustment of software by the key user to meet the company's specific working style. It also includes adding new fields to a screen and its related screens as well as creating mashups. Adjustments can be published to all users.

Personalize/Adapt via Side Panel

Virtually all personalization/adaptation is carried out in the side panel. The side panel can be opened on the right side of each screen and allows to personalize/adapt the screen's elements such as ICPs, forms, fields, quick links, tables, mashups.

The adaptation mode is only visible for key users and extends the personalization functions with adding new fields and mashups.

Accessing the Side Panel

The user can access the side panel:

- For personalization via Personalize --> This Screen
- For adaptation via Adapt --> Enter Adaptation Mode

Showing the Side Panel

The side panel shows all elements that can be personalized/adapted for the selected page. When showing the side panel, the visualization of the content area changes.

The following example shows the side panel for adapting a screen. The user can select which section groups are shown, change the title of the section groups, select the fields which are shown in a section group, etc.
Additional Personalization / Adaptation Features

The following personalization features are available (they are not carried out in the side panel):

- **My Settings**
- **Sticky Notes**
- Changing the image shown in the navigation area, the taskbar and the infobar (via **Personalize --> My Background image**)  
  Changing the **Work Center** sequence via drag and drop. **Home** can not be moved. It is always on the left.

The **key user** can carry out additional functions such as changing the **Getting Started** image or adapt the shell to the company’s branding.

**My Settings**

Users can define their settings via **Personalize --> My Settings**. These settings include for example:

- **Regional Settings**: Allows to define date and time format, time zone, decimal notation, language
- **Onscreen Help**: Allows to select whether help on screens, country-specific help and learning content should be displayed
- **Accessibility**: Allows to switch on accessibility mode
- **Tabbed Navigation**: Allows to define whether new screens are opened in a tab on the bottom or in a new window
Examples (Side Panel)

Find examples for:

- Personalize Home
- Personalize Work Center Overview
- Personalize Forms
- Personalize Tables
- Personalize ICPs
- Personalize Quick Links
- Personalize Mashups
- Personalize Calculations

**Personalize Home**

The user can define, for example, which content should be shown, add reports and mashups and define the layout.

**Personalize Work Center Overview**

The user can define, for example, which content should be shown, add reports and mashups and define the layout.
Personalize Forms

The user can define, for example:

- Which section groups are visible
- The title of the section group
- Which fields of a section group are visible
- The label for a field

Personalize Tables

The user can define, for example:

- Which fields should be shown and which should be hidden
- Number of displayed rows and columns, the table design, and the grid lines
• Calculation fields and the calculation parameter
• Which columns should be sorted and the sort direction.

Personalize ICPs

The user can define which ICPs are shown and how they are arranged (one or two-column layout).

Personalize Quick Links

The user can change the title Quick Links and define which groups and links are shown.
Personalize Mashups

The user can select mashups from the side panel. The mashups are added by the key user via adaptation.

Personalize Calculations

It is possible to display calculations in table views such as OWL and TOWL. The user can choose which kind of calculation should be done (for example sum or average). The following screenshot is taken from an FP3.0 ByD system.
More Information

Common Tasks
Object Worklist
Sticky Notes
Work Center
Floorplans and Patterns

In this chapter you find detailed guidelines for your mockup development and all the information you need to learn about the right usage of floorplans and patterns. The pages starting with "F -" describe the floorplans.

Summary
F - Fact Sheet

Floorplans and Patterns > Fact Sheet

Definition: Fact Sheet

A Fact Sheet (FS) is a one page overview of an object in a display-only presentation. It has the following attributes:

- Displays the most important properties of an object
- Comprises of one flat page without tabs and master-detail relationship but can have different views reachable via a Show menu button
- Contains additional links for navigating to related objects

Usually, a Fact Sheet contains the following elements in a display-only representation:

- Forms
- Lists
- ICPs
- Images

Consistency Rules

1. Title: Choose the following syntax: `<BO Type> Overview: <Object Identifier>`.
Example: Purchase Order Overview: 456343
* See Usage in Titles on how to display the object identifier in titles.
  * See Floorplan Titles (Fact Sheet, QAF, OIF, QAF) for additional guidelines for the title syntax (such as hierarchies or versions).

2. IDR: Use an IDR. The fields and their order should match the ones used in the associated OIF or QAF, see Identification Region.

3. Buttons:
   * Edit: Opens an editable screen. If QAF and OIF are available for the object, Edit opens the QAF (View All opens the OIF). If only an OIF is available for the object, Edit opens the OIF.
   * Close: Is mandatory and closes the Fact Sheet.
   * Print: Is mandatory and prints the information displayed on the screen. You can additionally use Preview for form-based printing. The order is Print, Preview.
   * New*: Is mandatory for Business Task Management (BTM), see New and Actions Buttons for BTM.
   * Show*: If you need to display different views in the Fact Sheet, do not use tabs. Use a Show menu button to switch between the different views. As the Fact Sheet should be kept simple the Show menu button is not recommended.
   * For more information see Button Placement in Toolbars.

4. View All: Opens an editable OIF if the user is authorized to change the object. If the user is not authorized the read-only OIF is launched.
   * If no OIF is available for the object but only a QAF, do not show View All.

5. More: Use a More link next to the section group title as an option to navigate to a specific OIF view of the according BO.

6. Tables: Show tables in Fact Sheets in display-only mode. Display as many rows as needed, but no more than 50.
   * You can use a toolbar, a Show dropdown list, and the basic/advanced search. A Master-Detail relationship is not allowed.

7. Notes: Put the notes above the attachments.

8. Attachments: Put the attachments below the notes. Use the icon display version of the Small Attachment Pane.

NOTE: For business objects that are sent to business partners (like purchase order, sales order), put the Latest Sent Business Document pane below the notes and attachments.

Keep in mind the following rules for the content area:

- Use a two-column layout.
- Place the basic data section on the top. This section contains the data of the business object.
- Place the advanced data below the basic data. This section contains additional data of the business object and also data from related business objects.
- Display reports in ICP layout.

Examples

The following screenshot is taken from an FP3.5 ByD system:

More Information
Form Pane
Image
Information Consumer Pattern
List Pane
Newspaper Layout
Adobe PDF Forms
F - Guided Activity

Floorplans and Patterns > Guided Activity

Page Content
Definition: Guided Activity
Consistency Rules: Editable Steps
Consistency Rules: Review Step (Optional)
Consistency Rules: Confirmation Step (Mandatory)
Examples

Definition: Guided Activity

The Guided Activity Floorplan (GAF) is a floorplan for an activity that can be divided in a logical sequence of steps. It consists of a series of screens that guide the user through an activity to achieve a specific goal. A roadmap provides a visual representation of the whole activity. The GAF can be used to create a business object regardless which floorplan is used to review and edit this business object later. The last step in the sequence is mandatory and called Confirmation. It appears after the user saved the data and displays a confirmation message. The optional step before the confirmation is called Review. In a review step the most important data is displayed to be checked by the user.

Consistency Rules: Editable Steps

1. **Title**: Choose one of the following title syntax:
   - New `<BO Type>` for creation, for example New Request for Quotation
   - `<Action>` `<BO Type>`: `<BO Identifier>` for other actions (BO Identifier is optional), for example Edit User and Access Data

2. **IDR**: The IDR is optional. If you use an IDR, show the labels on each step. Display the content step by step when the data has been entered.

3. **Steps**:
   - Number: Avoid using more than 9 steps.
   - Labels: Use Review (optional) and Confirmation (mandatory). Name the steps accurately. Use verb plus noun such as Define Bidders.

4. **Toolbar Buttons**: Use the following mandatory toolbar buttons: Previous, Next, Finish or `<F-Action>`, and Cancel. The Finish or `<F-Action>` button should be active from that step on when the user entered all mandatory data, at the latest on the Review step. For guidelines concerning toolbar buttons see Button Placement in Toolbars.

5. **Content area**:
   - Use a two-column layout for GAFs. Avoid three column layouts and broad tables.
Use a flat content structure. Do not use tabs, better think of putting the information on different steps.

**NOTE:** Do not use both, Save and Finish, in GAFs. If you want to allow the user to save data before finishing, use Save Draft and make sure that the status of the business object is Draft.

---

### Consistency Rules: Review Step (Optional)

![Review Step Diagram]

1. **Toolbar Buttons:** Use the following mandatory toolbar buttons: Previous, Next (disabled), Finish and Cancel. Preview can be added when needed. For guidelines concerning toolbar buttons see Button Placement in Toolbars.
2. **Review Content:** Summarize the information which is really important for the task and/or has been entered by the user. The content area is in display-only mode.

---

### Consistency Rules: Confirmation Step (Mandatory)
1. **Toolbar Buttons**: Use the following mandatory toolbar buttons: Previous, Next (both disabled) and Close. The **New** button is mandatory for Business Task Management (BTM), see **New and Actions Buttons for BTM**. For guidelines concerning toolbar buttons see **Button Placement in Toolbars**.

2. **Continue Work**: Offer meaningful links which enable the user to continue work.

3. **Success Message**: Display a success message in the message area.

**NOTE**: It is possible to display additional information in the content area. For example, if a user requests products via the Self-Service Go Shopping, all requested materials can be displayed on the **Confirmation** step.

### Examples

The following screenshots are taken from an FP3.5 ByD system:

#### Editable Step:
Review Step:

More Information

Avoid Redundancy between Group Titles and Labels
Master-Detail
Form Pane
Labels of GAF Steps
List Pane
Newspaper Layout
F - Modal Dialog

Floorplans and Patterns > Modal Dialog

Definition: Modal Dialog

Modal Dialogs (MD) are small movable and resizable windows that help the user perform a task out of an application context. They will be triggered out of a calling application and have to be completed before the user can continue to work in the calling application. Save is usually carried out in the calling application and not in the Modal Dialog.

A Modal Dialog contains:

- A content area for all patterns
- A toolbar with actions

Consistency Rules

1. Title of a Modal Dialog
   - The window title is the only identifying floorplan component used in a dialog and must, therefore, be self-explanatory. The title reflects the dialog’s action or purpose, with contextual information included as needed. In general, the dialog title should match with the label of the button that called up the dialog.
   - Example: Button label Enter Dunning Block - dialog title Enter Dunning Block.
   - If several objects are affected such as mass change, the title of the dialog might read Change Start Date (12 items selected).

2. Dialog Window Patterns
   - Close X: Same as OK button. It is mapped on the ESC key.

3. Content Area
   - Use the standard patterns as in other floorplans like Form Panes with groups of fields, radiobuttons, checkboxes, links, and tables, or a Browse and Collect pattern. Do not use tabs. Use either a single column layout (recommended) or when absolutely needed a two column layout.
   - Action buttons that do not relate to the whole content area must be placed next to the UI element.

4. Buttons
   - In editable modal dialogs which allow to perform an action, label the finalizing action OK. You can also rename OK to a label that reflects the task, such as Unmatch. The finalizing action is mapped on the ENTER key. If needed you can use more than one action.
   - The application can implement a Cancel function which cancels the action and resets the data. If available, place the Cancel button at the end.
   - If the finalizing action is Delete or any severe action the Cancel function will be mapped on the ENTER key.
   - In display-only modal dialogs use a Close button only. The button is mapped on the ENTER key.
When to Use a Modal Dialog

- When additional input from the user is needed for continuing with a task (such as referring to another object, see Create Business Objects With Reference (Follow-Up, Copy))
- When a decision is needed from the user for continuing with a task (such as confirmation dialogs, see Confirmation Dialog)
- To complete a form with additional values (such as rarely used fields of an address, see Addresses of Organizations and Persons)
- To display additional data for information

Use Modal Dialogs sparingly. If a task requires multiple dialogs consider using a GAF or a QAF instead. Read-only dialogs should also be used sparingly.

Modal Dialog with Two-Column Layout

Use when:

- To display and edit a complex object(s) that cannot fit into a master detail relationship
- To display and edit properties that cannot be displayed in a single list

NOTE: If the content gets too complex use other floorplans, such as an OIF, a GAF, or a QAF.

Browse and Collect Dialog

Use a Browse and Collect dialog:

- To allow the user to navigate to and select multiple object instances
- To allow the user to apply complex filtering criteria to a selection

Modal Dialog Window Size

Generally, Modal Dialogs should be as large as necessary and as small as possible. The Modal Dialog may contain up to two columns. Height and width should be less than the parent window.

Examples

The following screenshots are taken from an FP3.5 ByD system.

Example: Read-only Modal Dialog used to select data.
Example: Modal Dialog to select an object. The dialog closes by selection.

Example: Browse and Collect within a Modal Dialog
Example: For reverse entries the following modal dialog is used.

![Assign Payment On Account](image)

Example: A progress indicator within a Modal Dialog. The dialog can only be cancelled by the user. Thus, it only contains Cancel. It disappears automatically when the progress reaches 100%.

![Upload Progress](image)

More Information

Confirmation Dialog
Object Value Selector
F - Object Instance

Floorplans and Patterns > Object Instance

Definition: Object Instance Floorplan

The Object Instance Floorplan (OIF) allows users to create, delete, view, and edit attributes and associations of a business object (an employee, a purchase order, or a supplier’s record, for example). The OIF shows multiple view tabs whose content is determined by a defined business object type and the distinctive tasks a user has to perform with those. For more complex business objects the multiple view tabs can have one additional level of sub-tabs.

Consistency Rules

1. **Title**: Choose the following title format `<BO Type>: <Object Identifier>`
   Examples: Service Agent: Peter Bond, Purchase Order: 234325
   * See Usage in Titles on how to to display the object identifier in titles.
   - See Floorplan Titles (Fact Sheet, QAF, OIF, GAF) for additional guidelines for the title syntax (such as hierarchies or versions).

2. **IDR**: Put identifying data to the IDR. Place status information on the left, see Identification Region.

3. **Toolbar Buttons**:
   - Usually, use Save and Close as the first two buttons when creating or editing an object. If necessary, you can additionally offer an <F-Action>.
   - If you act on an already existing object, put the New button into the toolbar (for Business Task Management (BTM), see New and Actions Buttons for BTM).
   - In display-only OIFs, the first button is Close. <F-Action> and Save are not used.
   - See Button Placement in Toolbars.

4. **YCA Menu**: If a Fact Sheet is available for the BO, you must display the YCA menu to navigate from the OIF to the Fact Sheet, see You Can Also (YCA) Menu.
5. **Basic View**: If a Quick Activity is available for the BO, use Basic View to navigate to the Quick Activity.

6. **Tabs**: Use nouns for tab titles. Call the first tab General, followed by Line Items (optional) and further application specific tabs. Display then optionally the generic tabs Document Flow, Changes, Notes, Attachments, and Output History. Do not use Overview for the first tab.
   
   It is recommended to use not more than nine tabs. You can use sub-tabs in case of too many tabs.
   
   **NOTE**: If no tab data is available, the tab is disabled. If all sub-tabs do not contain any data, the tab node is disabled.

7. **Content**:
   - Always use group headers to group fields. Avoid repeating the tab title.
   - For forms, use a two-column layout with single-column section groups. The content area can also contain a List Pane or a Master-Detail pattern.

8. **Notes**: Optionally, put an additional text field to the bottom of the OIF. Use a group header to label the text field.

---

**Reducing Generic Tabs in OIFs**

In order to reduce the number of tabs in an OIF you can put the generic ones as sub-tabs below a tab called Miscellaneous. The generic tabs in an OIF are: Document Flow, Changes, Notes, Attachments, Output History. Label the sub-tabs accordingly.

**Do not** put the generic tabs on the first tab level when it results in more than nine tabs:

```
| General | <Tab> | <Tab> | <Tab> | <Tab> | Document Flow | Changes | Notes | Attachments | Output History |
```

**Recommended solution:**

```
<table>
<thead>
<tr>
<th>General</th>
<th>&lt;Tab&gt;</th>
<th>&lt;Tab&gt;</th>
<th>&lt;Tab&gt;</th>
<th>&lt;Tab&gt;</th>
<th>&lt;Tab&gt;</th>
<th>Miscellaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Document Flow</td>
<td>Changes</td>
</tr>
</tbody>
</table>
```

---

**Examples**

The following screenshot is taken from an FP3.5 ByD system:

![Screenshot of OIF example](image-url)
More Information

Avoid Redundancy between Group Title and Labels
Form Pane
Tab Chain
List Pane
**F - Quick Activity**

Floorplans and Patterns > Quick Activity

---

**Definition: Quick Activity**

The Quick Activity Floorplan (QAF) allows the user to quickly perform a specific task. This can be self-contained or a short sub-task within the context of a larger task (for example, a quick create of a bidder within the creation of a request for quotation). Therefore, a QAF is a simple task-specific alternative to a business object's OIF.

---

**Consistency Rules: New**

1. **Title**: Choose the following title syntax: *New <BO Type>*
   - Example: *New Purchase Order*
2. **IDR**: Do not use an IDR in create mode. The data is entered by the user and therefore already visible.
3. **Toolbar Buttons**: Use the following mandatory toolbar buttons: *Save and Close or <F-Action>* and *Close*.
   - **NOTE**: If besides the *<F-Action>* an additional *Save* button is available, the *New* button is also mandatory (for Business Task Management (BTM)), see *New and Actions Buttons for BTM*.
   - See *Button Placement in Toolbars*.
4. **YCA Menu**: The YCA menu is optional, see *You Can Also (YCA) Menu*.

---

![Diagram of Quick Activity Floorplan (QAF)](image)
5. **View All**: If an OIF is available display the View All button at the end. It opens the OIF in edit mode. The navigation is inplace.
6. **Content Area**: Use a two-column layout.
7. **Notes**: Put an additional text field to the bottom if needed.
8. **Attachments**: Put the attachments below the notes if needed.

### Consistency Rules: Edit

Only title and IDR rules differ from the **New** rules:

1. **Title**: Choose the following title syntax: `<BO Type>: <BO Identifier>`.  
   - Example: Purchase Order: 343463
   - See [Usage in Titles](#) on how to to display the object identifier in titles.
   - See [Floorplan Titles](#) for additional guidelines for the title syntax (such as hierarchies or versions).
2. **IDR**: Put status information to the left.
3. **New Button**: If you act on an already existing object, put the **New** button into the toolbar (for Business Task Management (BTM)), see [New and Actions Buttons for BTM](#).

### Consistency Rules: Action

Only title and IDR rules differ from the **New** rules:

1. **Title**: Choose the following title syntax: `<Action> <BO Type>: <BO Identifier>`.  
   - Examples: Negotiate Contract: 454565, Enter Time Data
   - See [Usage in Titles](#) on how to to display the object identifier in titles.
   - See [Floorplan Titles](#) for additional guidelines for the title syntax (such as hierarchies or versions).
2. **IDR**: Put status information to the left.
3. **New Button**: If you act on an already existing object, put the **New** button into the toolbar (for Business Task Management (BTM)), see [New and Actions Buttons for BTM](#).

### Consistency Rules: Display

For display-only QAFs no `<F-Action>` or **Save and Close** is necessary:
1. **Title**: Choose the following title format: `<BO Type>: <BO Identifier>`.  
   - See Usage in Titles on how to display the object identifier in titles.  
   - See Floorplan Titles (Fact Sheet, QAF, OIF, GAF) for additional guidelines for the title syntax (such as hierarchies or versions).

2. **IDR**: Put status information to the left.  
   For more guidelines see Identification Region.

3. **Buttons**: Do not use any `<F-Action>` or `Save and Close` function. If you act on an already existing object, put the `New^` button into the toolbar (for Business Task Management (BTM)), see New and Actions Buttons for BTM.

**Examples**

The following screenshots are taken from an FP3.5 ByD system.

**New Supplier:**

![New Supplier screenshot](image)

**Edit Lead:**
More Information

Avoid Redundancy between Group Title and Labels
Form Pane
Tab Chain
Tables
You Can Also (YCA) Menu
F - Work Center

Floorplans and Patterns > Work Center

Definition: Work Center

Work Centers (WoC), together with the Control Center (CC), form the primary work area. WoCs are represented as tabs in the upper navigation bar (located after the Home tab). Work Centers support task-specific activities (for example organizing employee benefits, managing purchase orders, planning and budgeting). A WoC grants the user access permissions to transactions and analytics. Each WoC has multiple views accessed via the Navigation Bar on the button or via the clicking the WoC in the Navigation Area and selecting the respective view. The WoC views are:

- Overview
- WoC specific views: A variable number of views needed to support the user tasks
- Reports

Consistency Rules: Overview

The Overview is the first view within a WoC. It displays a list of Quick Links which navigate to the most important Object Worklists (OWL) and Task-Based OWLs (TOWL) of the WoC views and usually Information Consumer Patterns (ICP) with analytic information. The Overview is optional but highly recommended to allow a quick access to the OWLs and to get a first glance on the most important analytics data.

Order of Content (Before Personalization):

The Quick Links are shown on top, followed by the ICPs. The Latest News are shown on the bottom.

1. Quick Links:
   - Label the tray Quick Links.
   - You can offer any query from any view or subview within a WoC as a Quick Link.
Consistency Rules: Views

WoC specific views appear between the Overview and the Reports view in the CNP. They typically feature a list of business objects (BOs) such as purchase orders displayed in an OWL. When a WoC view is clicked the content area is updated with the respective OWL. In rare cases the content area consists of a Gantt chart or a calendar or ICPs.

Consistency Rules: Reports View

The Reports view is the last view within a WoC. It displays a list of reports relevant for the complete WoC. The Reports view is mandatory as customers can create their own reports.

1. Use the Show filter and the basic and advanced search as in all other OWLs. For the entries in the Show dropdown listbox see Consistency Rules: OWL Queries.
2. Show the report specific buttons such as View as shown on the picture.
3. List all reports.
4. Show the detail tabs as displayed on the picture:
   - Report Views: Contains the views defined by the end user, the key user, and SAP
- **Report Details**: Shows, for example when was the report created and by whom, to which report categories it belongs
- **Report Assignment**: Shows which WoC and WoC views the report is assigned to

**Examples**

The following screenshots are taken from an FP3.5 ByD system.

**Work Center Overview**

![Work Center Overview](image)

**Work Center Reports**

![Work Center Reports](image)
More Information

Analytics
Calendar
Functions & Menus
Gantt Chart
Information Consumer Pattern
Object Worklist
Addresses

Floorplans and Patterns > Addresses

Page Content
Definition: Addresses
Consistency Rules: Addresses of Organizations and Persons
Consistency Rules: Editing Multiple Addresses

Definition: Addresses

Addresses is a generic pattern which ensures that international addresses of organizations and persons are displayed and printed correctly according to local postal and legal requirements.

Consistency Rules: Addresses of Organizations and Persons

Note: This is a generic pattern and the designer cannot change it.

The guidelines for the arrangement of address fields differ slightly between addresses of persons and addresses of organizations.

Address data can be differentiated as follows:

- Business partner information
- Postal address (for persons also workplace address)
- Communication data

Arrange the fields (if available) like shown in the pictures below. Use group headers that describe which type of address is shown, for example In-House Address or Business Communication.

Editable

<table>
<thead>
<tr>
<th>Organization</th>
<th>Person</th>
</tr>
</thead>
</table>

Top
Edit All Fields and Edit All Name Fields

Edit All Fields

The following picture shows the navigation from Edit All Fields link to the Modal Dialog:
Use a modal dialog to show all address fields, see Modal Dialog. Label the link Edit All Fields and the title of the modal dialog window Main Address: Edit All Fields.

**Edit All Name Fields**

The Modal Dialog for editing all name fields contains the following fields in the given order: Title, Academic Title, First Name, Middle Name, Last Name, Name of Birth, Nickname, Country for Name Format

The title of the Modal Dialog is: Business Partner Name: Edit All Fields

**Display-Only**

In display-only mode show the business partner name together with the postal address in one group without field labels. The display of communication data such as phone and fax is optional. If displayed, the communication data has to be shown with field labels.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Person</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supplier Main Address</strong></td>
<td><strong>Main Business Address</strong></td>
</tr>
<tr>
<td>Miller &amp; Son</td>
<td>Frank Sent</td>
</tr>
<tr>
<td>2576 Ashland Ave</td>
<td>145 Wolf Rd</td>
</tr>
<tr>
<td>Greenbay, WI 54304</td>
<td>Albany NY 12205</td>
</tr>
<tr>
<td>United States</td>
<td>United States</td>
</tr>
<tr>
<td>Phone: &lt;Number&gt;</td>
<td>Phone: &lt;Number&gt;</td>
</tr>
<tr>
<td>Fax: &lt;Number&gt;</td>
<td>Fax: &lt;Number&gt;</td>
</tr>
<tr>
<td>E-Mail: &lt;E-Mail Address&gt;</td>
<td>E-Mail: &lt;E-Mail Address&gt;</td>
</tr>
<tr>
<td>Web Site: &lt;Web Address&gt;</td>
<td>Web Site: &lt;Web Address&gt;</td>
</tr>
</tbody>
</table>

**Selecting Multiple Addresses**

You can select another organizational address via the Address OVS and another person’s address via the Copy Address link.
### Consistency Rules: Editing Multiple Addresses

1. Use a Master-Detail for adding and editing multiple addresses, see Master-Detail.
2. Use a dropdown listbox for choosing the address usage.
3. Use the View Map button to offer web services such as opening a map service that shows the location of the business partner.
4. For the content of the Address section group see Addresses of Organizations and Persons - Editable above.
5. For the content of the Communication section group see Addresses of Organizations and Persons - Editable above.

### More Information

**Forms & Fields**
Analysis Pattern

Floorplans and Patterns > Analysis Pattern

Definition: Analysis Pattern

The **Analysis Pattern (AP)** visualizes data in detail as a chart or table. APs can be launched from ICPs and the Work Center View Reports. AP is an alternative view of analytical data to the Quick Filter.

Compared to ICPs, APs enhance relevant functions which are needed for analytical reporting:

- Interactivity in navigation pane via drag and drop
- Quick filter on characteristics in navigation pane
- Separation between layout which is defined in the navigation pane and data selection which is defined via variables.

Consistency Rules

1. Title of report
2. **Buttons:**
   - Close: Closes the Analysis tab or window
   - View^: Allows to save the view
     - Save: Allows to save the view
     - Save as: Allows to save the view with a new name
     - Manage: Allows to delete views created by the user
   - **Settings:** Allows to define details for characteristics and key figures. Example: The user can define that the characteristic “Supplier” is shown with ID and name or with name only
   - **Selections:** Allows editing and managing variables and defining the start options (such as show selection area and start report, hide selection area and start report, show selection area and do not run report). Variables contain the values used for starting the report.
   - Add Fields: Allows adding fields and variables to the report
   - Print: Allows printing
   - Export^: Exports the report to Excel
   - Send^: Allows sending the report via e-mail as an online link with current data
3. **View:** The dropdown listbox enables switching between the views of the report.
4. **Variables**: The dropdown listbox is only displayed if the user has defined variables.

5. **Buttons**:
   - *Set as Default*: Allows to set view and variable as default
   - *Table*: Switches to table view
   - *Chart*: Switches to chart view

6. Icons for undoing the last action and the last saved status, respectively and showing header information, such as values used in variants and filters. *Details* shows technical information such as report UD, data source, system.

7. The navigation pane allows the definition of the report layout.

8. Content area

**Examples**

The following screenshot is taken from an FP3.5 ByD system.

![Screen shot of report analysis](image)

**More Information**

Analytics
Information Consumer Pattern
Quick Filter
Attachments

Floorplans and Patterns > Attachments

**Definition: Attachment**

An **attachment** is a file associated with a business object (BO). Attachments have additional properties such as system related ones, for example, created on or created by, and can be classified with a document type, such as a white paper or specification. An attachment is transported throughout business processes whenever its BO is used in follow-up processes. Attachments can be uploaded, deleted, opened or downloaded, for example.

**When to Use which Attachment Type**

<table>
<thead>
<tr>
<th>Attachment Type</th>
<th>When to Use</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard Attachment Pane</strong></td>
<td>- In a separate OIF sub view or in a GAF or QAF where Master-Detail is appropriate</td>
</tr>
<tr>
<td></td>
<td>- When one or more files or links should be attached either to the BO or to separate items</td>
</tr>
<tr>
<td><strong>Aggregated Attachment Pane</strong></td>
<td>- In the OIF Attachments tab. Do not use it in QAF and GAF.</td>
</tr>
<tr>
<td></td>
<td>- When all attachments of a BO, that means on header and item level, should be displayed</td>
</tr>
<tr>
<td><strong>Small Attachment Pane</strong></td>
<td>- Usually within the details area of a Master-Detail relationship, for example in a tab</td>
</tr>
<tr>
<td></td>
<td>- When one or more files or links either to the BO or to separate items should be attached</td>
</tr>
<tr>
<td></td>
<td>- In display mode in Fact Sheets</td>
</tr>
</tbody>
</table>

**Standard Attachment Pane**

The Standard Attachment Pane is a Master-Detail component. It either contains attachments on header level or on item level. It has two views: A **List View** (standard) and an **Icon View**. The user can switch between these two views. The Standard Attachment Pane is available in an editable and read-only version.

The following picture shows the **list view**:
1. Buttons: Use the buttons as shown in the picture.
2. Table or Icon View: Use the table structure and show the icon information as shown in the picture.
3. Details: Use the fields shown in the picture.

**Aggregated Attachment Pane**

The Aggregated Attachment Pane shows all attachments on BO level as well as on item level. In contrast to the Standard Attachment Pane it is not possible to add new attachments. The user can only open or download the attachments.

The Aggregated Attachment Pane is available in a read-only and display-only version.

The following picture shows the aggregated attachments:
Small Attachment Pane

The Small Attachment Pane has no details area. It is available in an editable, read-only, and display-only version.

The following picture shows the **list view**:

---

**Modal Dialogs for Adding / Replacing Attachments**

The following picture shows the modal dialog for *adding* an attachment:
The following picture shows the modal dialog for adding an attachment as a link:

![Add Link Example]

The following picture shows the modal dialog for replacing an attachment:

![Replace File Example]

More Information

Modal Dialog
Browse & Collect

Floorplans and Patterns > Browse & Collect

Page Content
Definition: Browse and Collect Pane
Consistency Rules
Examples

Definition: Browse and Collect Pane

Browse and Collect (BCP) is a UI pattern which allows the user to browse a list of items, select items from this list, and collect them in another list by either moving or copying them. The list that holds the collected items allows the user to reorder or modify these items to the extent possible in a List Pane and through the properties of the business object.

The BCP can be used in the Guided Activity Floorplan (GAF), Object Instance Floorplan (OIF), Quick Activity Floorplan (QAF) and in a Modal Dialog.

Consistency Rules

Side-By-Side Layout

Top-Bottom Layout

1. **Title**: Use the following list titles
   - *Available <Data>* such as *Available Suppliers* for the selection list.
   - *Selected <Data>* such as *Selected Suppliers* for the list that contains the selected data
2. **Find Form**: You can use a find form within the lists, see *Advanced List Pane*.
3. **List Height**: Use the vertical space available on the screen.
4. **Layout**: Use one of the following layouts. The two lists have the same height and appear symmetrical, even if one is empty. They do not need to have the same columns.
Side-by-side layout (horizontal BCP) is a 3 column by 1 row matrix layout where the shuttle control resides in the second column.

Top-bottom layout (vertical BCP) uses a 1 column by 3 rows matrix layout. The lists are displayed one below the other.

**NOTE:** In Modal Dialogs use always the side-by-side layout. If a list has one column, use the title row without a column header.

**Examples**

The following screenshot is taken from an FP3.5 ByD system:

![Select Org Structures](image)

**More Information**

List Pane
Tables
**Definition: Calendar**

The Calendar Pane is a UI Pattern used for creating, editing, viewing, and monitoring schedules, recorded employee times, time account entries (for example, overtime and vacation), and appointments. Appointments deriving from the back-end can also be displayed. However, it is not meant to replace the users’ personal calendar. The Calendar Pane can be embedded in application floorplans and used in Work Center (WoC) views. Editing is only possible in application floorplans but not in WoC views.

**Consistency Rules**

1. **Title**: Display a title on top (not needed when the calendar appears directly below a tab). When possible refer to the object of the calendar (for example System Maintenance Schedule) or else name it Calendar.
2. **Toolbar**: It includes controls that allow the user to act on calendar body content:
   - *Show* dropdown listbox (for example in the Year view) allows the user to select and display all or a subset of entry types (see Year view).
   - *Period* dropdown listbox displays Day, Week, Month, Year, Pay Period, and other views.
   - Calendar paginator allows navigation to the previous or next time period for the current view.
   - Action buttons, such as a New button to clear the Details area and create a new entry.
   - Delete button deletes a selected calendar entry.
3. **Calendar Body**: Keep visual indicators (holidays, period separators, semantic colors, etc.) to the minimum required to convey the context of use.
   Different options can be turned shown or hidden: Row selection column, week number column, holidays, alternating cell color, weekends, vertical scroll, and separators (pay period, fiscal time or none). Row headers may contain BO categories or calendar timeframes. They may be hyperlinked or not depending on the other views provided.
4. **Legend**: Below the body of the calendar a legend can be added.
5. **Details**: The details area appears below the Calendar body and below the legend, if present. You can use tabs.
## Colors

The following colors are allowed in calendars:

<table>
<thead>
<tr>
<th>Semantic Code for Calendar</th>
<th>Color Hex</th>
<th>Color RGB</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>TODAY</td>
<td>2 pixel Border FCDC82</td>
<td>252, 220, 130</td>
<td></td>
</tr>
<tr>
<td>SELECTED1</td>
<td>BBDDDD</td>
<td>187, 221, 221</td>
<td></td>
</tr>
<tr>
<td>SELECTED2</td>
<td>F6F387</td>
<td>246, 243, 136</td>
<td></td>
</tr>
<tr>
<td>SELECTED3</td>
<td>C3D8AE</td>
<td>195, 221, 174</td>
<td></td>
</tr>
<tr>
<td>SELECTED4</td>
<td>F66767</td>
<td>246,103,103</td>
<td></td>
</tr>
<tr>
<td>SELECTED5</td>
<td>FE8913</td>
<td>254, 137, 19</td>
<td></td>
</tr>
<tr>
<td>CALENDAR_Metal</td>
<td>DCDCDC</td>
<td>220, 220, 220</td>
<td></td>
</tr>
<tr>
<td>CALENDAR_PEACH</td>
<td>F8E5C8</td>
<td>248, 229, 200</td>
<td></td>
</tr>
<tr>
<td>CALENDAR_BLUE</td>
<td>D0E1EB</td>
<td>208, 225, 235</td>
<td></td>
</tr>
<tr>
<td>CALENDAR_ROSE</td>
<td>EBDAE1</td>
<td>232, 218, 225</td>
<td></td>
</tr>
<tr>
<td>CALENDAR_PURPLE</td>
<td>E9DBF0</td>
<td>233, 219, 240</td>
<td></td>
</tr>
<tr>
<td>CALENDAR_AQUA</td>
<td>C5EAEE</td>
<td>197, 234, 238</td>
<td></td>
</tr>
<tr>
<td>CALENDAR_TEAL</td>
<td>CCE3E3</td>
<td>204, 227, 227</td>
<td></td>
</tr>
<tr>
<td>CALENDAR_YELLOW</td>
<td>EFEFB0</td>
<td>239, 239, 176</td>
<td></td>
</tr>
<tr>
<td>CALENDAR_BROWN</td>
<td>E5E9C1</td>
<td>229, 224, 193</td>
<td></td>
</tr>
<tr>
<td>CALENDAR_DEFAULT</td>
<td>E6E9DC</td>
<td>230, 233, 220</td>
<td></td>
</tr>
<tr>
<td>CALENDAR_GREEN</td>
<td>D6ECAE</td>
<td>214, 236, 174</td>
<td></td>
</tr>
</tbody>
</table>

## Examples

The following screenshot is taken from an FP3.5 ByD system:
More Information

Object Instance
Changes

Floorplans and Patterns > Changes

Page Content
Definition: Changes
Consistency Rules
Examples

Definition: Changes

Changes is a display-only UI pattern used to show a history of business object data changes. It is provided as a tab within an OIF. It provides a search form on top and a master-detail pattern comprising two lists arranged one below the other.

Consistency Rules

Note: This is a generic pattern. The designer cannot change it.

1. Title: The tab title is labeled Changes.
2. Search: The user can specify a date range. Additionally attributes can be selected. Users who made changes can be chosen from the users list.
3. Master List: Shows at what date/time a change was made by whom.
4. Details List: Displays for each changed attribute the old as well as the new value.

Examples

The following picture is taken from an FP3.5 ByD system:
More Information

Object Instance
Confirmation Dialog

Floorplans and Patterns > Confirmation Dialogs

Page Content
Definition: Dialogs for Messages
Consistency Rules: General
Consistency Rules: Confirmation of Deletion
Consistency Rules: Warning of Data Loss
Consistency Rules: Warning of Locked Record
Consistency Rules: Download File Dialog

Definition: Dialogs for Messages

Dialogs for Messages are used to display text-based messages. Unlike a message in the Message Region, message dialogs windows can include a question that requires an explicit response by the user. For example, if the user changes data in a floorplan window and then tries to close the window without saving the changes, a warning message appears in a message dialog. A message dialog asks the user for an acknowledgement, a confirmation, a decision, or mere attention to an information. It can be used to display messages, when the message region is either not available or does not provide sufficient visibility.

Consistency Rules: General

1. Window Title
   Use the following title format Confirm <Action>. For deletion use Confirm Deletion, for a warning message use the title Warning.

2. Dialog Window Controls
   Only the window close (X) appears in a message dialog.

3. Message Type Icon (optional)
   For the available message types see Definition: System Message.

4. Message Text
   The text of the message appears in plain text, to the right of the message type icon. It informs the user of the situation (for example, an error occurred or an action needs to be taken). Either the message text or the question (see below) must appear, you can also show both.

5. Question
   Asks the question to be answered by the user via the action buttons. The question text appears in bold right of the message type icon and below the message text. Either the message text (see above) or the question must appear, you can also show both.

6. Action Buttons
   Depending on the type of the message dialog use the following buttons:
   - Confirmation: Use OK and Cancel. For deletion use Delete and Cancel.
   - Decision: [<Yes>] [No] [Cancel], replace <Yes> and <No> with meaningful words such as Save and Discard.
   - Acknowledgement: Use OK only.
   - Information: Use Close only.
   **NOTE:** Cancel or Close close the dialog window and let the user return to the parent window without triggering a process/action associated with the pop-up.

   **NOTE:** The message dialog does not have any scrollbars.

When to Use a Message Dialog

ISO 9241-13 (chapter 9.2.5, Error Prevention) recommends the following: "If user actions can have destructive consequences and cannot be undone, a warning or confirmation message should be provided to alert the user to consequences before executing the requested action."

Use a message dialog when the Message Region does not provide essential visibility for the message. Do not use a message dialog for error messages where explicit acknowledgement is not required. Such messages appear in the Message Region.
A message dialog can be used to display messages in the following scenarios:

- The Message Region can not display messages or is not available
- Confirmation of deletion
- Warnings for data loss
- Record locking

**Consistency Rules: Confirmation of Deletion**

Deletion is an action that may have serious consequences. A modal dialog requires users to confirm deletions they initiate.

![Confirm Deletion dialog](image)

- Show the dialog title **Confirm Deletion**.
- Use the warning icon.
- Show one of the following message texts:
  - If the user selects a **single** item: Are you sure you want to delete <item>? whereas <item> can be Purchase Order 2711 for example
  - If the user selects **multiple** items: Are you sure you want to delete <count> selected records?
  - If a distinction between single and multiple selection is not possible: **Are you sure you want to delete the selected record(s)?**
- Use the buttons **Delete** for deleting the item and **Cancel** to go back to the application without any action.

**Consistency Rules: Warning of Data Loss**

Warning of data loss dialogs notify the user that their unsaved data gets lost when proceeding with the selected action. This dialog is also used in case of navigation to another floorplan via **You Can Also**.

![Warning dialog](image)

- Show the dialog title **Warning**.
- Show the message text **This application contains unsaved data.**
- Show the question text **Do you want to save before continuing?**
- Use the buttons **Save** to save the data before continuing, **Don't Save** to discard the data before continuing, and **Cancel** to go back to the calling application.

In case the data can not be saved use the following variant:

![Warning dialog](image)

- Show the dialog title **Warning**.
- Show the message text **All data will be lost.**
- Show the question text **Are you sure you want to delete your work?**
- Use the buttons **OK** to confirm the deletion or **Cancel** to go back to the calling application.

**Consistency Rules: Warning of Locked Record**
In some use cases, multiple users access a business object instance at the same time. If a record is locked because it is already edited by another user, the system displays a dialog telling the user that the record is locked and offering options for the next action, as shown in the figure below.

![Warning Dialog](image)

- Show the dialog title *Warning*.
- Show the message text *This record is locked for editing. The data is in read-only mode.*
- Show the question text *Do you still want to continue?*
- Use the buttons *OK* to show the record in read-only mode and *Cancel* to go back to the calling application.

**NOTE:** Alternatively, a warning message can be displayed in the Message Region. While this approach is less intrusive, the user is more likely to overlook the message when it appears in the Message Region.

### Consistency Rules: Download File Dialog

When a file is exported to MS Excel an information dialog shows up. Pressing *Save* shows up the Windows File Save Dialog to allow entering a file name and a directory.

![Export to Microsoft Excel Dialog](image)

**More Information**

*Modal Dialog*
**Custom Pane**

Floorplans and Patterns > Plug-In

---

**Page Content**
Definition: Custom Pane
When to Use a Custom Pane

---

**Definition: Custom Pane**

A Custom Pane is a 'pseudo' UI pattern that can include controls and functions for screens that are not created using a pattern-based approach. Custom Panes are used for freestyle elements in a floorplan.

---

**When to Use a Custom Pane**

Developing Custom Panes requires two to four times more resources than pattern-based UI development. Developing a screen with even one Custom Pane involves significantly more resources than a pure pattern-based approach. It is important to use Custom Panes sparingly; it is allowed only when a need is justified.

The following steps are required to justify a foundation screen:

- Illustrate an understanding of the problem space
- Create a mock-up of the proposed solution
- Develop an alternative that uses only the pattern-based UI approach
- Describe the business case for the Custom Pane versus the pattern-based UI solution
- State the problem that the Custom Pane resolves. List the reasons why this solution is an important candidate for a custom pane. If possible, support your case by including information on the following:
  - Technical requirements
  - User requirements
  - Market requirements
  - Competitive analysis

The use of a Custom Pane does not relieve the designer of the responsibility to ensure consistency in the application's look and feel.

---

**More Information**

Solution Development Kit (SDK) for Custom Panes and Custom Controls
**Document Flow**

**Floorplans and Patterns > Document Flow**

**Definition: Document Flow**

Document Flow is a display-only UI pattern used to show the status of a document and its related documents. It is provided as a tab within an Object Instance floorplan. It provides a graphical view of the development of a document across all related application areas. All documents are displayed with basic information and their ID. The user can click the ID to open the document's Fact Sheet. When viewing the document flow of a purchase order, the pattern shows, for example, the whole development from the purchase request to the purchase order, the goods receipt and finally the invoice.

**Consistency Rules**

Note: This is a generic pattern and the designer cannot change it.

1. **Tab Title**: The tab title is labeled Document Flow.
2. **Title**: The title is also labeled Document Flow.
3. **Toolbar**:
   - **Show**: The user can choose between a standard view and an extended view. The standard view shows a simplified linear flow. The extended view displays all documents that have occurred between the initial document and the current document status.
   - **Zoom Buttons**: The user can change the size of the view in predefined steps. The percentage is indicated between the zoom buttons.
   - **Toggle Navigation Window**: The hand icon opens the navigation window where the user can select and jump to a certain part of the document flow.
   - **Refresh**: Refreshes the view of the document flow.
   - **Return to Initial View**: In case the user gets lost in a complex flow structure this button lets the view jump to its upper left hand corner.
4. **Flow Element**: The document in a certain status of the flow is displayed. The leading document - the document from which the user called the document flow function - is displayed with a stronger frame and a different background. The flow element contains:
The document title
The ID which links to the document's Fact Sheet
Other descriptive content such as a status or a further brief description

5. **Footer Icon**: Displays a BTM task icon or an anchor icon or an additional folder icon. Flow elements with anchor icon display the flow of the original document. Those with the BTM icon show the related BTM tasks which accompanied a document status. The additional folder icon leads to an accounting journal.

6. **Arrows**: They indicate the flow and status change of the document.

**Examples**

The following screenshot is taken from an FP3.5 ByD system:

![Screenshot of a document with flow elements and icons](image_url)

**More Information**

- Gantt Chart
- Hierarchical Graph
- Object Instance
Find Form

Floorplans and Patterns > Find Form

Definition: Find Form Pane

The Find Form Pane is a special type of a Form Pane used to enter search criteria and to execute a more complex query on an associated Advanced List Pane. Find Form is used in OWLs and OVS. It can also be used in any other table.

- **Basic Find**
  The Basic Find has two mandatory fields. In the Show field you can select a query and in the and Find field a search string can be entered. The basic find is always available. You need to define which BO fields the system searches for this string. The maximum number of fields to be searched for is 10.
  - Do not include non-string fields such as date fields and amount fields.
  - Include the following fields in prioritized order (if available):
    - ID and Description
    - All fields visible by default in the list
    - Important fields which are hidden by default
  - **NOTE:** Different queries require different basic find and search scope definition.

- **Advanced Find**
  Consists of more than one search field and is optional for OWLs and OVS. The advanced find fields are usually hidden and can be shown via the Advanced link. If required by the use case the advanced find can be shown initially. Clicking the icon next to a field in the advanced find opens the select options dialog to define ranges. The advanced find can be hidden by the Basic link.

Consistency Rules

**Layout:** To avoid horizontal scrolling the FFP must be limited to two column layout. It is recommended to display a maximum of 5 rows per column in the FFP.

1. **Basic Find:** A single line google-like search.
   - Mandatory fields: Show for selecting a query and and Find for entering a search string. The Go Button executes the query.
   - **Advanced Find:** Enables searching for detailed options in the database tables using advanced mode. The advanced mode is optional. Query parameters have to be editable, even if they have a default value. Query parameters that should...
not be edited by the user must be hidden. In case the user edited fields of the current query and clicked the Go button entry in the Show dropdown listbox of the OWL changes to Modified View - `<Query Name>`.

2. **Toggle Advanced - Basic**: Toggles between basic find and advanced find. The query selection performed in the toolbar in the basic find is the same as in the advanced find.

3. **Section Groups**: It is recommended to use section groups with titles in FFPs with more than 10 fields to enhance readability. Do not define more than 4 groups. Even if you do not use titles define section groups to get a tab chain according to newspaper layout (column-wise top-to-bottom).

For Object Work Lists (OWL), stick to the following four groups. You can use these groups also for other Advanced List Panes:

- `<Primary BO Data>`: Fields of the primary BO (Account Data in an Account OWL, or General, for example)
- `<Secondary BO Data>`: Fields of secondary BO or secondary data (Supplier Data or Items, for example)
- `<Organizational Data>`: Use exactly this group title. If you have 4 groups then configure this group to start in a new line to ensure correct order of groups.
- `<Administrative Data>`: Use exactly the group title and field labels as shown on the picture. It is always the last group.

4. **Fields**:

- ID and description of a BO are displayed below each other with the ID above the description.
- The labels of the fields in the Find Form Pane and in the column headers of the result list need to be identical. Exception: If a column contains a melting field, it is recommend to use each single field as a search field. Example: A column "Name" is a melting field consisting of last name and first name. You can use two fields in the FFP, "First Name" and "Last Name". It is also allowed to use one field if the search scope covers both fields.
- Do not use an Object Value Selector on the BO ID field for the business object which has opened the current OVS. The reason is to prevent cyclic value help. For example: The OVS for a purchase order must not contain an OVS trigger on the Purchase Order ID field.

- **Date/Time**: It is technically possible to display a melting field for date and/or time. Therefore searching a time period has to be handled as follows:
  - If allowed by the use case, offer only one search field for the start or end date. Via select options the user can specify a time span in which the respective date has to be.
  - If the user needs the possibility to define a time period for the start date and end date you have to offer two separate fields.

- Always arrange the start date above the end date.

5. **Toolbar**:

- The button order is `[Go] [Reset] [Save Query] [Organize Queries]`.
  - **Go** executes the search
  - **Reset** restores the initial state of the selected query (clears all fields that were filled out manually)
  - **Save Query** allows you the definition of recurring search queries. **Save Query** gets enabled as soon as at least one field of the Advanced Find has been filled out manually. It opens a modal Dialog to save the current query. The name will be available in the query selection of both basic and advanced find modes. The checkbox **Execute Query on Selection** is check marked by default. If the checkmark is not set the user will have to click the **Go** button to perform the query.

  - **Organize Queries**: allows the management of saved queries. In the modal dialog you can rename and delete user defined queries. You can also set the checkmark to execute queries on selection and it is possible to define a default query for the basic and advanced find. The **Delete** button is mandatory. It is inactive when a SAP ByDesign Query or no query is selected. The SAP ByDesign Queries appear in read-only mode.

6. **Select Options**: The icon opens a modal dialog which allows you to set detailed filters on the field you have selected before.
In the modal dialog you can as many filter options as you like. Use the Add Option Button for inserting a new line. The Remove Button removes the current line. The OK Button closes the dialog and transfers the filter values into the field which opened the dialog.

**NOTES:**

- Use tri-state checkboxes: Blank, Checked, Unchecked. Blank returns a list with both values.
- If the automatic execution of a query causes performance problems, allow the execution on user request only. In this case the following message is displayed: Click Go to execute the query. If no result is available, the following message is displayed: No records found.

**Section Groups**

The layout of the find form follows the newspaper layout meaning to have one column section groups only. See Keyboard Navigation, Tab Chain for further information.

**Examples**

The following screenshot is taken from an FP3.5 ByD system:

![Sales Orders](image)

**More Information**

- Advanced List Pane
- Enterprise Search
- Object Value Selector
- Object Worklist
- Tooltips for Generic Functions
Form Pane

Floorplans and Patterns > Form Pane

Definition: Form Pane

The Form Pane (FP) is a UI pattern which arranges section groups in a predefined layout either single column wise (newspaper layout) or two column wise. Section groups contain input controls like fields and dropdown listboxes. The input controls can be shown as editable, read-only, or display-only. See Tab Chain for examplary Form Pane arrangements and the tab chain.

Consistency Rules

Title
Use a Form Pane title only when there are several distinct Form Panes or List Panes with the need of seperate titles.

Buttons
Form Panes can have a toolbar. It is placed directly below the title.

Tab Strips
Tabs can be used to group forms into different views but also within a form to group part of a form.

Form Pane Content
A Form Pane typically contains Section Groups with fields that semantically belong together. A Section Group within a Form Pane is identified by a title. For details of form layout see Forms & Fields.

NOTE: If you show only the ID or the description/name in a form, take care that you put the other one into the hidden fields.

Controls within a Form Pane
You can use the following controls within form panes:
<table>
<thead>
<tr>
<th>No</th>
<th>Element</th>
<th>Description</th>
<th>Display-only Appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Input Field</td>
<td>Typically appears in conjunction with a label. A <em>required</em> field is indicated by a red asterisk after the last character of the label for that field. A field can be accompanied by a Value Help control displayed to the right of the input field.</td>
<td>Not allowed.</td>
</tr>
<tr>
<td>2</td>
<td>Dropdown Listbox</td>
<td>Dropdown Listbox control allows the selection of one predefined value from the listbox.</td>
<td>Not allowed.</td>
</tr>
<tr>
<td>3</td>
<td>Global Data Types</td>
<td>Input and Value Help controls appear as determined automatically by the business object (BO) definition. The global data type determines the appropriate user interface control necessary to enter or select the data. These user interface elements may include up to three form fields with the appropriate input and value help controls. For example, the Global DateTime data type is mapped to three form fields within one melting group: (1) a date field with a calendar control, (2) a dropdown listbox for time, and (3) a dropdown listbox for Time Zone Code.</td>
<td>No field borders. Background color is the same as the floorplan.</td>
</tr>
<tr>
<td>4</td>
<td>Melting Group</td>
<td>A combination of two or more controls, usually fields or dropdown listboxes, which are treated as one control. One of the controls must have a fixed size and position while the other stretches to fill the layout cell. A Melting Group does not wrap.</td>
<td>No field borders. Background color is the same as the floorplan.</td>
</tr>
<tr>
<td>5</td>
<td>Checkbox</td>
<td>The checkbox with either checked or unchecked state appears usually on the right side of a label when it comes alone within a group of fields.</td>
<td>Display either as disabled checkbox or as value (as text) of Yes (checked) or No (unchecked) to the right of the label. See Fields: Checkboxes.</td>
</tr>
</tbody>
</table>
### Checkbox Group

Checkboxes can be related to each other in that they refer to the same aspect of a business object. A checkbox group allows multiple choices from an offering of two or more choices. The checkbox appears at the **left** side of the label.

Display either as disabled checkbox or as value (as text) of **Yes** (checked) or **No** (unchecked) to the right of the label. See **Fields: Checkboxes**.

### Radiobutton Group

A group of radio buttons are related by topic and provide the user the option to select a single exclusive choice from an offering of two or more choices.

Display either as disabled radio buttons or as text value: **Yes** (checked) or **No** (unchecked) to the right of the label.

For example:
- **High:** No
- **Medium:** Yes
- **Low:** No

### Text Edit

Editable text is displayed in a defined area. A text edit field must include a label. The label should be put on top of the edit field.

No field borders. Background color is the same as the floorplan. A label is optional if a group header can function as a header for multiple fields.

### TextView

TextView (display-only static text) is displayed in a defined area within a column layout. The TextView can have a label or a header, but not both.

No field borders. Background color is the same as the floorplan.

### Link

A hyperlink navigation control

Allowed

### Button

Buttons can only be placed after a field, see **Button Placement in Forms**.

Not allowed

---

**Examples**

The following screenshot is taken from an FP3.5 ByD system:

![Supplier/Bidder Form](image)

**More Information**

**Forms & Fields**
Gantt Chart

Floorplans and Patterns > Gantt Chart

Page Content
Definition: Gantt Chart
Consistency Rules
Examples

Definition: Gantt Chart

The Gantt Chart is a UI pattern with a graphical representation of the duration of tasks against the progression of time. The Gantt Chart is used for planning, scheduling, tracking, co-ordinating, and editing projects. An optional details area for editing entries is included. The chart can be embedded in any application floorplan.

The Gantt Chart:

- Displays the schedule of objects against a timeframe visualized in graphical and tabular areas.
- Offers the option of creating new nodes/items and links between business objects (BO) nodes.
- Provides access to detailed information about an item (details of a specific task, for example).

Consistency Rules

1. Toolbar: Buttons may be enabled/disabled based on the row/item/entry selection in the Gantt. Use the following toolbar elements in the given order:
   - Show: Displays different views
   - Add*: Adds a new node (could allow selection of different type in menu)
   - Delete: Deletes a selected node
   - Arrows: Moves a node accordingly (Move Up, Move Down, Outdent, and Indent)
   - Expand: Shows items subordinated to the current line - the items will be displayed indented
   - Collapse: Hides the indented subordinated items to the current line
   - Magnifying glass icons: Zooms/unzooms into the the graph area for a detailed view for a range of three weeks
   - Scroll To*: Lets the user jump to a certain date in the graph area:
     - Task: Jumps to the starting date of the current node
     - Today: Jumps to the current date
   - Schedule: Schedules the selected nodes
   - Find: Opens a Modal Dialog to find a string
   - Hide Details / Show Details: Hides or shows the Details Area below the chart.

2. Table: The table can be a hierarchical or a flat list. The user can enter data in the empty row after the last item. Data is saved when the Save button of the application floorplan is activated, and the item is created at the same hierarchical level as the last item. Detail data can be displayed for the new item.

3. Graph: Displays the interactive or read-only graphical part of the Gantt Chart showing bar chart entries along a horizontal time axis. Relationships, if any, between items/BO nodes can be shown.

4. Splitter: A splitter between the table and the graph allows to resize both areas with the mouse.

5. Cell: Each cell corresponds to an instance of the chosen time unit. White by default and twelve additional background colors available.

6. Bar: Items from the table are normally represented as a bar on the Gantt graphic (large, medium, thin, or a phase (fish/arrow
shape). By default, the size is set to large and labels appear to the right of a bar, and can be set to appear inside.
In a hierarchical table, the parent entry becomes a Project Summary Task, which can be set to critical (Orange).
Different colors can be used to represent entries/items: Default, Purple, Teal, Peach, Brown, Rose, Blue, Green, Aqua, Yellow, Metal, Black, Critical (orange), and Red.
Duration of entries/items can be modified by edits made in the tabular rows or by dragging the edge of the respective graphical element. Editing the entry/item in the graphical part is reflected as a change in the tabular part and vice versa.
A tool tip containing entry/item specific information is displayed on the entries (graphical element). Entries are selectable in the graph/table using the mouse.
Links can be created and deleted between entries/items.
7. **Milestones**: Milestones can be added on a row of the graph and take different shapes and colors (Gold, Silver, Green, Red, and Black).
8. **Dependencies**: Dependencies for successor or predecessor items can be defined for accurate scheduling.

### Examples

The following screenshot is taken from an FP3.5 ByD system:

![Hierarchical Graph Example](image)

### More Information

- **Hierarchical Graph**
- **Document Flow**
Hierarchical Graph

Floorplans and Patterns > Hierarchical Graph

**Page Content**
Definition: Hierarchical Graph
Consistency Rules: Editable
Consistency Rules: Display-Only
Consistency Rules: Hierarchies
Consistency Rules: Networks
Arrangement of Hierarchical Graph and Details Area
Examples

---

**Definition: Hierarchical Graph**

The **Hierarchical Graph (H-Graph)** is a UI pattern that visualizes a hierarchical set of nodes in a graphical parent-child structure. Connected nodes following this structure are aligned with straight lines. The H-Graph can display the following structures:

- Hierarchical networks (one parent with multiple children)
- Web network (multiple parents and children)

The content area can display more than one chart at a time suited to business needs. Nodes can be set to:

- single-selection
- multi-selection with lead selection
- display-only

Nodes are created or attached using:

- a template
- a new node from the Hierarchical Graph content area
- a new node created in the hierarchical table view which corresponds to the graphical view

---

**Guidelines for UI Development**

*Preview is not available in FP3.5.*

The pop-up menu trigger on an existing node is not available in FP3.5.

---

**Consistency Rules: Editable**

1. **Toolbar:** The toolbar let the user perform actions either on the selected node or for the entire H-Graph. The green marked entries are mandatory:

   - Show: Displays different views in the Hierarchical Graph content area
   - New*: (recommended): Creates a new node. Possible options depend on the context. Example: Phase, Task, and...
Milestone:
The menu of the New button allows to either insert a parent node or a child node. A parent node is always inserted at root level no matter which node has been selected prior. A child node is always inserted underneath the selected node. Nodes dragged from the template area and dropped to the content area are inserted as parent nodes unless they are dropped on top of an existing node. In that case the new node becomes a child node of the selected.

- **Edit** (recommended): This menu provides functions for the current node and its child nodes. Place the menu items in the following order:
  - **Copy**: Copies the current node to the clipboard. The node remains on the clipboard until it is pasted in the content area or another node is cut or copied.
  - **Cut**: Copies the current node to the clipboard and deletes the node after the user selected the paste function.
  - **Paste**: Inserts a node from the clipboard under the current node. The user can select Paste from the Edit button on the toolbar or the paste function on the pop-up menu of a node.
  - **Convert to Root**: Moves a node to the top level. The function is disabled if the selected node is a root node and enabled if the selected node is a child node.
  - **Delete**: Deletes the current node and its possible child nodes

- **Print**: Prints out the Hierarchical Graph.
- **Preview**: Displays a print preview
- **Indentation Icon Buttons**: Perform the selected indentation action for the current node.

- **Actions**: Place functions in this menu which can contextually be grouped such as expand, expand all, collapse, collapse all.

It is recommended to use the **Actions** menu but you can also place the items directly in the toolbar.

- **Expand**: Expands the current node and shows its child nodes. Alternatively the user can use the + (plus) button on the node.
- **Collapse**: Hides the child nodes of the current node. Alternatively the user can use the - (minus) button on the node.
- **Expand All**: Shows all hierarchies of nodes
- **Collapse All**: Hides all subnodes and shows only root nodes

**Zoom functions**: Offer one of the following options:

- Magnifier icons + (plus) and - (minus): Zoom the H-Graph content area gradually in defined steps in/out.
- Zoom dropdown listbox (recommended): The user can select the desired zoom factor from this menu and the view of the H-Graph content area zoom in or out accordingly, such as 500%, 200%, 150%, 100%, 75%, 50%, 25%, 10%, Fit to Page: Automatical choice of a zoom factor that allows all nodes to be viewed in the H-Graph content area

- **Navigate**: Shows a simplified view of the chart structure. A semi-transparent rectangle highlights the area of the charts that can actually be seen on the H-Graph content area. By moving the highlighted area within the window the current content area adjusts that the highlighted area always represents the picture detail of the actual content area. This helps the user to gain overview of the whole picture of the complete chart structure and still see the details on the H-Graph.
- **Center**: If no node has been selected the whole chart area will be centered. A selected node and its child nodes will be centered.
- **Schedule**: Creates or modifies the scheduling data of the current node.
- **Search Text input field plus Find button**: Searches inside the H-Graph for the string the user typed in. By success the first node which matches the criteria is activated and centered.
- **Hide/Show Details toggle (mandatory)**: Shows or hides the details area.
- **Table/Chart toggle (mandatory)**: Switches the view in the Hierarchical Graph content area between a tree and a chart. In table view the toolbar contains the same buttons as in chart view, except the Center button.

<table>
<thead>
<tr>
<th>Edit</th>
<th>Navigate</th>
<th>Actions</th>
<th>Chart</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;Org Unit Name&gt;</td>
<td>&lt;Org Unit ID&gt;</td>
<td>&lt;Column Header&gt;</td>
<td>&lt;Column Header&gt;</td>
</tr>
<tr>
<td>▼ &lt;Name&gt;</td>
<td>&lt;ID&gt;</td>
<td>&lt;Content&gt;</td>
<td>&lt;Content&gt;</td>
</tr>
<tr>
<td>▼ &lt;Name&gt;</td>
<td>&lt;ID&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• &lt;Name&gt;</td>
<td>&lt;ID&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• &lt;Name&gt;</td>
<td>&lt;ID&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▼ &lt;Name&gt;</td>
<td>&lt;ID&gt;</td>
<td>&lt;ID&gt;</td>
<td></td>
</tr>
<tr>
<td>• &lt;Name&gt;</td>
<td>&lt;ID&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• &lt;Name&gt;</td>
<td>&lt;ID&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>© &lt;Name&gt;</td>
<td>&lt;ID&gt;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. **Templates**: Templates can be dragged and dropped into a Hierarchical Graph content area to generate a set of nodes and link them together.
The templates area can be shown and hidden or horizontally be expanded/reduced by using the corresponding icons on the...
2. **Hierarchical Graph Content Area:** Content (nodes, links) can be added, moved to a new location, and deleted. New nodes can be added using the following functions:
   - Drag and drop (from templates)
   - Pop-up menu trigger on an existing node: Selecting `New` from the pop-up menu. The new node is inserted as a child node of the existing node. The pop-up menu trigger offers various options for nodes. Nodes that are created via this pop-up menu are inserted as subordinated nodes. Recommended for this menu are the items `New`, `Edit`, `Actions` as well as their sub-menus.
   - In a hierarchical network, the orientation of the hierarchy can be top-bottom (vertical) or left-right (horizontal).
   - In a web network, the orientation can be left-right, right-left, top-down, and bottom-up.

4. **Nodes:** Each node has an ID (mandatory) and a title (optional) which can be edited in place. If a node has at least one child node a plus or a minus sign will appear at the bottom left corner. The minus sign collapses all child nodes of the selected node, the plus sign expands the child node(s). The expand and collapse function does not affect the nodes structure.

---

**Consistency Rules: Display-Only**

1. **Toolbar:** The toolbar buttons offer the same options as for the editable H-Graph. See *Editable Hierarchical Graph*. Except:
   - Edit button (mandatory): Switches the H-Graph into edit mode where you can work as described in *Editable Hierarchical Graph*.

2. **Hierarchical Graph Content Area:** Content (nodes, links) is displayed in the Hierarchical Graph content area. You cannot add or
modify nodes or use templates. All other properties of the content area are equal to those in the editable H-Graph. See Editable Hierarchical Graph.

3. Nodes: Each node has an ID (mandatory) and a title (optional). If a node has at least one child node a plus or a minus sign will appear at the bottom left corner. The minus sign collapses all child nodes of the selected node, the plus sign expands the child node(s). The expand and collapse function does not affect the nodes structure.

4. Table/Chart toggle (mandatory): Switches the view in the Hierarchical Graph content area between a tree and a chart. In table view the toolbar contains the same buttons as in chart view, except the Center button.

Consistency Rules: Hierarchies

In a hierarchical network, the orientation of the hierarchy can be top-bottom (vertical) or left-right (horizontal). Illustrated below are a few graphical representation (hierarchy/network) as extracted from various requirements:

**Example 1**

![Example 1](image)

**Example 3**

![Example 3](image)
Example 2
Consistency Rules: Networks

In a web network, the orientation can be left-right, right-left, top-down, and bottom-up.

Example 1
Arrangement of Hierarchical Graph and Details Area

The details area appears in a Form Pane below or on the right, and it can include a header or a tab strip. If the content area is empty, the details area presents a message: *No nodes selected*. If the details area appears on the right, the different areas can be resized dynamically. For more information see Master-Detail.

Hierarchical Graph with details area below:
Hierarchical Graph

Details Area

Hierarchical Graph with details area on the right:

Examples

The following screenshot is taken from an FP3.5 ByD system:

More Information

Gantt Chart
Document Flow
Identification Region

Floorplans and Patterns > Identification Region

Definition: Identification Region

The Identification Region (IDR) is a constituting UI Pattern supporting the user in identifying an application, and the object(s) handled in it.

The IDR consists of the following areas:

- The Basic Identification Area includes the window title (if multi-window navigation is used) and the application title. It allows the user to pick the correct window, if several are open, and to correctly identify the object or activity at hand.
- The Extended Identification Area provides further identifying information for the respective object or activity. It is valid for the entire floorplan and exposed in a display-only presentation.

Consistency Rules

IDR without ticket area:

1. Title
2. Status
3. Fields
4. Fields
5. Fields

IDR with ticket area:

1. Ticket Area
2. Status
3. Name/Description
4. Fields
5. Fields

1. Title: For the naming of the title see corresponding Floorplan chapter.
2. Number of Entries: Do not use more than 5 fields unless really necessary.
3. Ticket Area: Use the ticket area when the title information is not unique. This information includes not only a unique ID but also additional information that allows to identify an object. If you use name (or description) and ID within the ticket area place the name (description) on top and the ID below. If required, place a link on the ID. You can also place an image into the ticket element, see Image.
4. Fields:
   - Display fields in the IDR as label/value pairs. Values are display-only or links. You can also use icons, especially for the status information.
   - Use a melting field for ID and description, see Visualization in Melting Fields, Separate Fields, or One Field.
   - Fields can change from one step to another in a GAF: Display data from previous steps in the IDR of the current step.
5. Order of Fields:
   - Put the status information to the left. If the Extended Identification Area contains a ticket area put the status information right after the ticket area.
   - The status information is followed by identification information in descending importance.
   - Show administrative data such as Created By at the end. Use the same order as in the section group Administrative Data, see Forms: Administrative Data.

NOTE: Do not use an IDR in QAFs for creating business objects.

For IDR in Business Configuration see Consistency Rules: BC Views

Examples

The following screenshot is taken from an FP3.5 ByD system:
More Information

BC Views
Fact Sheet
Guided Activity
Object Instance
Quick Activity
**Image**

Floorplans and Patterns > Image

---

**Definition: Image Pane**

An image is a representation of an object in an optical form unit and not in a character format. The Image Pane is used to upload and to display images. The **Image Pane** can be used in any Form Pane and in the Identification Region to upload one or several images. Images need to come with a tooltip. When adding an image the user has to enter a title. This title is shown in the tooltip.

---

**Consistency Rules**

**Edit Mode**

If no images are uploaded: The **Image Pane** has the title *Image* and shows a menu button *Image* with the following entries in the given order: *Add, Delete, Replace*

![Image Pane](image.png)

If images are already uploaded: Additionally, *Previous* and *Next* buttons are available to navigate between the images.

![Image Pane with buttons](image_with_buttons.png)

**Display Only Mode**

In display only mode the buttons are not shown.

---

**Examples**

The following screenshot is taken from an FP3.5 ByD system:
More Information

Attachments
Form Pane
Identification Region
Modal Dialog
Notes
Tooltips
Information Consumer Pattern

Definition: Information Consumer Pattern

The Information Consumer Pattern (ICP) visualizes data in a compact way as a chart or a table and is embedded in Work Center views as well as in other floorplans, for example Fact Sheets. ICPs have a tray which shows the report title and allows to collapse, expand, and refresh the ICP. ICPs can come with or without toolbar.

An ICP with toolbar has the following features:

- Enables the user to navigate to the Analysis Pattern (AP) in order to see the complete report data, perform drill downs, etc.
- Has a dropdown list box for changing between different ICP view and - if defined by the user - a dropdown listbox for variables

An ICP without toolbar does not have the following features:

- Change view
- Navigate to AP
- Personal settings

Consistency Rules

1. The ICP has always an ICP tray. The title in the tray shows the name of the report, the icon at the right allows to expand and collapse the tray.
2. View filter: Allows to switch between the ICP views. The views can either be standard views or created by the user.
   - If the user has defined variables, an additional dropdown listbox Variables is shown. Variables contain the values used for starting the report.
3. Actions:
   - View Details: Enables to navigate to an AP in order to see more details
   - Set Latency: Enables to define when the system should refresh the report data
4. Icons for switching between table and chart view.
5. Refresh information: Is the screen initially opened all data are up to date and no refresh information is shown. After exceeding a certain time span - the default value is six hours - the refresh information is displayed and the user can press the Refresh button.

See Tooltips for Generic Functions for the tooltips on ICP buttons.

Design Recommendation:
Use not more than four ICPs and use a two-row layout.

Examples

The following screenshot is taken from an FP3.5 ByD system.

ICP Table View:
### Purchase Orders per Month

<table>
<thead>
<tr>
<th>Ordering Year / Month</th>
<th>Ordered Net Value/Limit in Company Currency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 2011</td>
<td>361,03 USD</td>
</tr>
<tr>
<td>Feb 2011</td>
<td>407,277.46 USD</td>
</tr>
<tr>
<td>Mar 2011</td>
<td>2,135,923.30 USD</td>
</tr>
<tr>
<td>Apr 2011</td>
<td>817,655.192.42 USD</td>
</tr>
<tr>
<td>May 2011</td>
<td>3,185,208.30 USD</td>
</tr>
</tbody>
</table>

---

**More Information**

- Analysis Pattern
- Analytics
- Tooltips for Generic Functions
### List Pane

**Floorplans and Patterns > List Pane**

**Page Content**

- Definition: List Pane
- Consistency Rules: Flat List Pane
- Consistency Rules: Advanced List Pane
- Consistency Rules: Hierarchical List Pane
- Generic Value Placeholder

---

#### Guidelines for UI Development

The list menu which contains functions such as Select All is not available in FP3.5.

The buttons Move up, Move Down, Outdent, Indent are not available in FP3.5.

Multiple selection of rows in hierarchical tables is not available in FP3.5.

Editing of heterogeneous item levels is not available in FP3.5.

The function to move and rearrange sub trees is not available in FP3.5.

The Generic Value Placeholder is not available in FP3.5.

---

### Definition: List Pane

The **List Pane** (LP) is a UI pattern containing data in a tabular form. It provides elements like a title, a toolbar, a filter row and functions such as sorting.

The List Pane supports four selection modes:

- Non-Selection
- Single-Selection
- Standard Multi-Selection
- Multi-Selection with Lead Selection. Note that multi-selection and lead selection are only technically but not visually differentiated.

The selection modes (except Non-Selection mode) can coexist with editing modes.

List Panes have the following flavors:

<table>
<thead>
<tr>
<th>Flavor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat List Pane</td>
<td>Standard list</td>
</tr>
<tr>
<td>Advanced List Pane with Grouping</td>
<td>Is a Flat List Pane containing a Find Form on top additionally. Optionally, items can be grouped. Grouped items have common attributes and are items of the same level. Intermediate headers represent a group of line items. The intermediate header is a full width row that can be expanded and collapsed. A triangle icon toggles between showing and hiding the grouped items.</td>
</tr>
</tbody>
</table>
| Hierarchical List Pane        | Is an extension of Advanced List Pane and can group the items into a hierarchical structure of several levels. The number of levels is unlimited but should be handled carefully to avoid unnecessary complexity. The hierarchical structure is indicated in the first column:  
  - Triangle: The item contains at least one sub item.  
  - Bullet point: Item without subordinated items  
  - Indents: The indention indicates the hierarchical level of each item. Can be used in OWLs and all activity floorplans. The columns have to be homogeneous across all levels - heterogeneous BOs are possible as long as they share the same columns. |

---

### Consistency Rules: Flat List Pane
1. **Title**: Choose the following title format: `<List Name>`, for example Quantity Conversions, Purchase Order Items.

2. **Toolbar**: For editable List Panes the only mandatory button is *Add Row*. Think about having the *Remove* or *Delete* button as well in this case such that the user can remove the content of a row, see *Add and Delete Rows*.

3. **Number of Columns**: Choose an appropriate number of columns to avoid horizontal scrolling. Put additional columns into the hidden section.

4. **Number of visible Rows**: See *Number of Rows*.

5. **Input Row**: Is automatically available as the last row in editable List Panes. This row counts as one of the visible rows (see 4).

**NOTE**: For information on how to label the column that counts the table lines and how to number, see *Label and Numbering of Table Lines*.

**List Menu**: The List Menu appears on the column header above the row selectors. It is always visible unless the table is set to the Non-Selection mode. The option states vary depending on the table. For multiple selection it contains: *Select All, Deselect All, Copy*, *(to Clipboard)*.

---

### Consistency Rules: Advanced List Pane

The **Advanced List Pane (ALP)** is like a Simple List pane which has a Find Form on top of the table. ALP can be read-only or editable.

#### Read-only ALP

The read-only ALP is used in OWLs to give an overview of a list of business objects.

1. **Title**: Use the format: `<View Name>`, see *Object Worklist*.

2. **Search**: There are the following items in the search area:
   - *Show* dropdown listbox (mandatory)
   - *Find* field for basic search (optional)
   - *Toggle Basic / Advanced search* (optional), see *Find Form*

3. **Toolbar**: Use the buttons as defined for OWLs, see *Object Worklist*.

---

### Editable ALP

The editable ALP provides the *Add Row* button. It is not possible to create or edit a business object.
The toolbar has the following items, the checked is mandatory:

- Add Row
- Insert Row
- Print List
- Export
- Copy
- Remove
- T-φ
- Line Actions
- Actions

### Grouped List Pane

**Grouped List Pane (GLP)** is an Advanced List Pane with an additional grouping option. Groups are a collection of items with a common attribute. All items within a group are at the same level. List Pane items can be of the same or a different BO type but the items must share a set of common attributes that are used for grouping.

GLPs are visualized by intermediate headers which represent a group of line items. The intermediate header is a full width row that can be expanded and collapsed (via the triangle in the picture below), thus showing and hiding the grouped items.

**NOTE:** The initial state of a grouped list is "open".

Use a meaningful attribute for naming the grouping criteria.  
*None* stands for no grouping.

### Consistency Rules: Hierarchical List Pane

**Read-only Hierarchical List Pane**

A hierarchical List Pane (HLP) can appear instead of an ALP within an OWL. It is read-only.
1. **Toolbar:** Use the typical OWL buttons and those specific for hierarchical tables. The specific buttons for hierarchical tables are placed after the OWL specific buttons and before the Actions^ button. It is recommended to use the Actions^ button to group all functions of the hierarchical levels. See Object Worklist.

2. **Columns:**
   - The first column shows the hierarchy: <Icon> <Item Name>. The triangle icon indicates a superior item, a bullet icon shows a node with no subordinated levels.
   - Choose an appropriate number of columns to avoid horizontal scrolling.
   - Create homogeneous columns across all levels. Heterogeneous BOs are possible as long as they share the same columns.

### Editable Hierarchical List Pane

Hierarchical tables allow editing of data as well.

1. The toolbar contains:
   - Optionally a function to select data (Show DDLB)
   - Optionally icon buttons to move nodes up and down as well as to a higher or lower hierarchical level
   - The Add <Node Name> button to add new nodes, for example "Add Subgroup". Do not use Add Row for hierarchical tables.
     Instead of the Add <Node Name> button you can also use Add Multiple, see Add Multiple Rows.
   - Further specific functions

2. It is recommended to place Expand, Collapse, Expand All, and Collapse All in this order into the Actions^ menu. For tables with few options it is also allowed to place the Expand, Collapse, Expand All, and Collapse All buttons at one end of the toolbar in this order. Expand and Collapse are needed to expand or collapse a complete partial tree. For hierarchies with only two or three levels only Expand All and Collapse All are needed.

3. Empty rows are usually added within the hierarchical structure via the Add <Node Name> button. Sub-trees can be expanded and collapsed.

**NOTE:** The hierarchical table does not contain a list menu.

**Hierarchy Maintenance**
The user can change the sequence of, as well as promote or demote, an item within the hierarchy via icon buttons placed after the Show dropdown listbox. These buttons can be made visible at design time, based on the content type parameter setting. Hierarchy modifications are only possible with items in the current node.

<table>
<thead>
<tr>
<th>No.</th>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Move Up</td>
<td>Moves the selected row(s) up one row but does not change the hierarchical level. For example, if the selected row is a root node, the item is moved up one row, but the item remains at the root level. The Move Up button is disabled when the first row in the table is selected.</td>
</tr>
<tr>
<td>2</td>
<td>Move Down</td>
<td>Moves the selected row(s) down one row but does not change the hierarchical level. The Move Down button is disabled when the last row in the table is selected.</td>
</tr>
<tr>
<td>3</td>
<td>Outdent</td>
<td>Moves the selected row(s) up one level in the hierarchy. This button is disabled if the selected row is a root node and no further promotion for the row is possible.</td>
</tr>
<tr>
<td>4</td>
<td>Indent</td>
<td>Moves the selected row(s) down one level in the hierarchy. The button is disabled if the selected row is a leaf node in the hierarchy and no further demoting is allowed.</td>
</tr>
<tr>
<td>5</td>
<td>Adding Rows</td>
<td>When the user clicks the Add &lt;Node Name&gt; button in the toolbar, a new row will be added as a leaf node below and on the same hierarchical level as the currently selected item. A new entry can be added to any level of the hierarchy. If no items are selected before adding an item, the new row will be added on the root level at the bottom of the table.</td>
</tr>
<tr>
<td>6</td>
<td>Removing Rows</td>
<td>Removes a row in the hierarchical List Pane and removes therewith the current item from the table. The user can select one or multiple rows for deletion, if the table allows such an action. Removing parent nodes with subordinated child nodes will delete the child nodes automatically.</td>
</tr>
</tbody>
</table>

Hierarchy Maintenance: If Hierarchy Levels are Heterogeneous

1. **Left side**: Use a one-column hierarchical table (tree-like) on the left side of the content area.
2. **Right side**: Display the different details on the right side of the content area

Hierarchy Maintenance: How to Move Sub-Trees
The user:

1. Selects the source entry to be moved.
2. Clicks **Rearrange**. A modal dialog opens.
3. Selects the target location.
4. Can click **Apply** to preview the changes of the update.
5. Presses **OK** to save. The modal dialog is closed and the sub tree is moved to selected target location.

**Generic Value Placeholder**

In case a selected row has several subrows with different values or entries, use a tilde as value placeholder.

**More Information**

Add and Delete Rows  
Button Placement in Toolbars  
Context Menu  
Find Form  
Object Worklist  
Status  
Tables
Definition: Master-Detail

Master-Detail consists of a master section (usually a table) at the top and a details section (usually a form pane) below it. If the user selects an entry within the master section the details of the entry are displayed in the details section.

- The Master section can consist of a (hierarchical) table, a chart, an Information Consumer Pattern, or a Calendar Pane.
- The Details area provides a quick overview of the selected object and covers its essential information. Tabs should be avoided whenever possible. The reason is that the purpose of the details area is only to help the user to find the right object in the list. For further details the user can open the fact sheet via the object link or switch to the object instance via the Edit button.

Consistency Rules

1. Master Area
2. Title: Choose the following title format: Details: <BO Type> <Object Identifier> or Line Items: <BO Type> <Object Identifier>. <Object Identifier> can either be Description or ID or both. If you use ID and description, use “ - ” as a separator. Examples: Details: Quote 423245, Line Items: Service Cleaning Offices, Details: Product 234456 - Heater
3. Details: The content of the details can change depending on the selected master entry. In rare cases, a master table containing BOs of the same BO type can show different details. This means that fields and tabs can be hidden or disabled or shown.
   - You should avoid using tabs in the details to structure the data. Do not use a table title when the table is the only element within a tab.
   - Repeat all fields that need to be edited - also hidden fields - of the master List Pane in the detail form. Take into consideration to repeat also non-editable fields if they help the users orienting themselves.
   - Exception 1: If the detail does not contain more than two additional fields, do not repeat the editable columns of the master table.
   - Exception 2: For display-only detail, do not repeat any column of the master table.

Take also into consideration:

- Hierarchy: Do not display more than 3 hierarchically dependent areas on one screen:
Arrangement of Master-Detail

The master and the detail section occur on one screen. The default is to display the master on top and the detail below. As an exception the master can be displayed in the left and the detail on the right.

**Standard: Master is displayed on top, detail on bottom:**

**Exception: Master is displayed left, detail right:**
Examples

The following screenshot is taken from an FP3.5 ByD system:

![Sales Orders Screen](image)

More Information

Object Instance
List Pane
Notes

Floorplans and Patterns > Notes

Page Content
Definition: Notes
When to Use which Note Type
Read-Only Notes
Notes History
Notes Table
Examples

Definition: Notes

Notes is a specific UI pattern for entering, editing, and displaying plain text.

When to Use which Note Type

<table>
<thead>
<tr>
<th>Note Type</th>
<th>When to Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read-Only Notes</td>
<td>• You can use the read-only text box within any floorplan and the OWL preview.</td>
</tr>
<tr>
<td></td>
<td>• The read-only text box without frame and scrollbar is only needed when the whole text of a note must be shown at once, for example when showing security remarks within manufacturing.</td>
</tr>
<tr>
<td></td>
<td>• Use the read-only text box with language support if the users need to switch between languages.</td>
</tr>
<tr>
<td>Notes History</td>
<td>• You can use the notes history within any floorplan.</td>
</tr>
<tr>
<td></td>
<td>• Use it if recording the notes and comments by multiple persons over time is needed, for example for service requests and incidents.</td>
</tr>
<tr>
<td>Notes Table</td>
<td>• You can use a notes table within an extra tab of the OIF for the BO header or within an extra tab of the details pane of a BO item.</td>
</tr>
<tr>
<td></td>
<td>• You can include a notes table as an extra step within a GAF.</td>
</tr>
</tbody>
</table>

Read-Only Notes

The following picture shows a read-only note:

![Read-Only Note Example]

Notes History

All previous notes are shown in the history part. The most recent note is at the top. The user can enter a new note in the text field:
If multiple note types are available, the user can show all notes of the selected type. The Add^ menu contains all note types that can be created:

---

**Notes Table**

In general, the notes table is a combination of a standard table and a notes edit control where the table is the master and the notes edit the detail. Within the table, more than one text can be attached to a BO header or a BO item. When texts of different note types and languages exist for a BO header or item, they can be aggregated in the appropriate table. The standard table behavior enables the user to manipulate the text such as adding, editing, or deleting text.
Examples

The following screenshot is taken from an FP3.5 ByD system:

More Information

Attachments
Text Translation
Object Value Selector

Definition: Object Value Selector

The **Object Value Selector** (OVS) is a UI pattern to support users in selecting values for an input field. It helps to select one item from a table of BO instances. It is most commonly called from an input field with a selection dialog icon. If the input field contains data, it is transferred to the selection modal dialog. Unlike other input and value help controls, the OVS does not appear attached to the input field. Rather, it appears within a modal dialog that floats above the entire window. It is possible to save and organize queries.

Consistency Rules

1. **Title**: Choose the following title format: Select `<BO Name>`, for example Select Contact.
2. **Order and Number of Columns**: If available display ID and description of the BO in the first and second column, respectively. Display additional information after them. Recommended is a maximum of 5 columns in the OVS results table, less than 5 columns is always fine.
3. **Advanced Find**: 
   - Close the Advanced Find by default.
   - Use always two columns.
   - Do not use an Object Value Selector on the BO ID field for the business object which has opened the current OVS. The reason is to prevent cyclic value help. For example: The OVS for a purchase order must not contain an OVS trigger on the Purchase Order ID field.
   - Offer columns of the search table also in the Advanced Find.
   - Add additional search fields if required.
   - For more guidelines concerning Advanced Find see Find Form.
4. **Filter Row**: Show the filter row by default.
5. **Toolbar**: The button order is Go, Reset, Save Query, Organize Queries. As soon as the user defines a query the Show dropdown listbox is placed left to the Find field. You can find more detailed information in Find Form.

Examples

The following screenshot is taken from an FP3.5 ByD system:
More Information

Find Form
Tooltips for Generic Functions
Value Help
**Object Worklist**

Floorplans and Patterns > Object Worklist

---

**Guidelines for UI Development**

For FP3.5:

- Enable the Export button on OWLs even if the list is empty.
- Print List is not available.

---

**Definition: Object Worklist (OWL)**

The **Object Worklist (OWL)** is a List Pane which is always embedded in a Work Center view. The OWL contains business objects such as purchase orders or opportunities. The user can, for example, search for, display, and edit objects as well as trigger follow-on processes. A special OWL type is the task-based OWL which contains the tasks associated with the business objects.

---

**Consistency Rules: OWL**

1. **OWL Title**: Choose one of the following title formats:
2. Show Dropdown Listbox:
   - Define an All <BO> query in all OWLs thus being able to provide the complete set of data. Make All <BO> the last entry within the Show dropdown listbox. For further information see Consistency Rules: OWL Queries.
   - **NOTE:** Queries which could have a huge performance impact should only be executed on explicit user request and not immediately when selecting the query. Therefore, give it an ‘explicit’ indicator which prevents the execution of the query on select.

3. Group By: It is recommended to use Group By. For example, if the OWL contains a status column and you offer "status" as a grouping criterion, the user can easily access the objects according to their status. Use the mandatory entry None so that the user can ungroup the list.

4. Toolbar Buttons:
   - Use the buttons in the following order (the checkmarked buttons New* and Export* are mandatory, either Edit or View is mandatory):
   
<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Edit</td>
<td>View</td>
<td>New</td>
<td>Preview</td>
<td>Print List</td>
<td>Export</td>
<td>Copy</td>
<td>Delete</td>
</tr>
<tr>
<td>Follow-Up</td>
<td>1:1</td>
<td>&lt;BO Action&gt;</td>
<td>Actions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   - If it is not possible to edit objects but only to display objects, replace Edit with View. If you need both functions, order them as follows: Edit, View, New, etc.
   - Do not repeat the word “new” for entries in the New* button menu. Use only the name of the object to be created such as Opportunity.
   - For BTM entries within the New* button, see New and Actions Buttons for BTM. For entries within the Export* button, see Output Management. For importing data via Excel, see Office Integration.

5. Columns:
   - Put the status column to the left followed by the most important columns, see Order of Columns.
   - Do not show too many columns (<=7) to avoid a horizontal scrollbar but show the data in the details/preview area.
   - Do not add the details/preview data to the hidden table columns.
   - If the object consists of ID and description, put ID and description as separate columns into the OWL and offer a melting field consisting of ID and description as a hidden field.
   - The column header wraps and the content truncates.
   - Define the column for default sorting. The default sorting usually depends on the use case.
   - For BTM entries, use the following columns: BO Identifier, BO Type, BO ID, BO Identifier.

6. Context Menu: The context menu allows to apply additional functions on the list items, see Context Menu.

7. Number of Rows: Whenever possible use 10 rows. For detailed guidelines see Number of Rows.

8. Initial Selection: When the OWL shows up initially, the first row has to be selected, thus displaying the according preview.

9. Details/Preview Title: Choose one of the following title formats:
   - Details: <BO Identifier>
   - Details: BO Type/Object Identifier

   For more guidelines on how to display the Object Identifier in titles see Usage in Titles.

10. Content/Details/Preview:
    - Use a two-column layout in forms.
    - The OWL preview is always display-only. Also the table in the details area is in display-only mode (not as read-only as long as nothing can be selected).
    - Group fields and use group titles. Do not duplicate fields in the details area when the values are already displayed in the details title. Example: The title contains the ID, do not display the ID in the details area.
    - Avoid tabs in the OWL preview. If really necessary do not use more than two tabs. Name the tabs as in the corresponding OIF.

**NOTE:** If no OWL entry is selected, the details area is not shown.

---

**Consistency Rules: TOWL Placement**

You can place the Task-Based Object Worklist (TOWL) either in the Show dropdown listbox of a Work Center view or in a separate WoC view called Work. It is not allowed to have My Work in a sub view.

**Open Tasks in the Show dropdown listbox**
Place **Open Tasks** as the first entry into the dropdown listbox.

**WoC view Work**

1. Create a view called **Work**: Within this view you show all task lists for the respective Work Center.
2. Place **Open Tasks** as the first entry into the dropdown listbox. It displays all tasks the user needs to work on. Show the remaining task lists below.

**NOTE:** The advantage of one Work view is that the user can centrally access all tasks. As the list usually contains heterogeneous BOs, the disadvantage is that only the least common denominator of table columns can be displayed. You can show in the preview area BO specific information but this can not compensate the advantage of having all specific table columns at a glance.

---

**Consistency Rules: TOWL Content**

1. **Toolbar Buttons:**
   - Use the buttons in the following order (the checkmarked buttons **Edit**, **New^**, **Export^** and **Actions^** are mandatory):
   - See **New and Actions Buttons for BTM**.
2. **Group By:** If you design a view **Work** offer the entries in the given order: **None, Priority, Status, Due Date, Sent On, Business**
Document Type
You can add application specific entries below.

3. Mandatory Columns: Keep the following order of mandatory columns in the TOWL table:
   - Escalation
   - Task Category
   - Notes
   - Attachments
   - For the icons used in the first four columns see Icons.
   - Priority
   - Status
   - Subject
   - Due Date: Show the date without time.

   Optional Columns: Show additional BO specific columns in descending importance. Choose an appropriate number of
   columns (<= 11) to avoid horizontal scrolling.

   Hidden Columns: Add at least Sent On (without time) and - if you design a view Work - the Business Document Type to
   the hidden columns.

4. Subject: Put a link on the subject and offer a context menu, see Context Menu.

5. Details Title: Choose the title format: <Task Category>: <Task Subject>, where task category is replaced by Task, Notification,
   etc.

6. Task Information: Display the following task information in the upper part of the details area:
   - Description (long text)
   - From (If the task has been generated by the system or a technical user, the field contains the value System.)
   - <Responsible> is replaced by Org Unit Responsible or Person Responsible

7. BO Information: Show the most important BO information in the lower part of the details area.

8. Find Form Pane:
   - Use the following mandatory fields in the Find Form Pane of the TOWL: From, Subject, Sent On (note that since
     the number of TOWL items can grow intensely over time and hence the system loading time, it is recommended
     to preset a date), and Due Date.
   - If needed, you can add application-specific search fields.
   - If you only use the mandatory fields arrange them as shown below:

     ![Find Form Pane](image)

   If you use additional fields, group them as shown below. If you use a title (not mandatory) for the group containing the
   task fields, label it Task Information.

     ![Task Information](image)

Consistency Rules: OWL Queries

We differentiate between the following OWL queries:

- BO-based OWL (most commonly used)
- Task-based OWL in the Show DDLB
- Task-based OWL as a view
- MDRO-based OWL
- Adjustment Run-based OWL
- Reports OWL

Use title case for all queries.

BO-Based OWLs

Stick to the following syntax:

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Legend:
- `<Name>` represents the BO type, the name of a subview or a use case-dependent name. `<Name>` needs to be included in all entries. The reasons are: When downloading the OWL to Excel, the query title is used as the title in the Excel list. Some OWLS contain business objects of a different type.
- `<Status>` represents the state of `<Name>`.
- `<Time Statement>` represents a certain point in time or time period, for example "Orders Of Returns Of Last 90 Days".
- `<Condition>` represents a condition the `<Name>` is dependent on, for example "Tasks By Registration", "Purchase Order To Be Cleared".

### Stick to the following guidelines:

<table>
<thead>
<tr>
<th>Guideline</th>
<th>Example</th>
</tr>
</thead>
</table>
| Define an All `<Name>` query for each OWL to provide a complete set of data. Place it on bottom of the Show dropdown listbox. | Requests in Preparation  
Cancel requests  
All Requests |
| All entries should be visible in full length.                             |                                                                        |
| If you combine the BO's lifecycle status (such as In Preparation and In Revision) and another status (such as Active and Obsolete), order the entries according to the BO lifecycle status. | Active Balance Confirmation Runs  
Balance Confirmation Runs in Preparation  
Balance Confirmation Runs in Revision  
Obsolete Balance Confirmation Runs  
All Balance Confirmation Runs |
| Group similar items.                                                     |                                                                        |
|                                                                            | Open Sales Order Items  
Open Customer Return Items  
Open Service Order Items  
Open Service Confirmation Items  
All Sales Order Items  
All Customer Return Items  
All Service Order Items  
All Service Confirmation Items |

### Task-Based OWL in the Show DDLB

Stick to the following guidelines:
- Label the query Open Tasks and put it at top of the Show dropdown listbox (default query).
- Put the BO queries such as Requests in Preparation below.

For information on TOWLs see TOWL Placement and TOWL Content.

### Task-Based OWL as View

Stick to the following guidelines:
- Label the view Work.
- Put Open Tasks at the top of the Show dropdown list (default query).
- Use the syntax `<Name> Tasks` for the queries, such as Open Payroll Tasks.

For information on TOWLs see TOWL Placement and TOWL Content.

### MDRO-Based OWL

See MDRO.

### Adjustment Run-Based OWL
Use the following queries in the given order. Do not add additional ones. Do not change the wording:

- Active \(<BO\) name\> Runs
- \(<BO\) name\> Runs in Process
- \(<BO\) name\> Runs in Revision
- Obsolete \(<BO\) name\> Runs
- All \(<BO\) name\> Runs

**Reports OWL**

Use the following queries in the given order. Do not add additional ones. Do not change the wording:

- By Report Category
- My Priority Reports
- All Reports

**Examples**

The following screenshots are taken from a ByD FP3.5 system.

**Object Worklist:**

![Task-based Object Worklist](image)

**Task-based Object Worklist:**
More Information

Context Menu
Find Form
Functions & Menus
List Pane
MDRO
Office Integration
Output Management
Status
Tables
Quick Filter

Definition: Quick Filter

The Quick Filter (QF) visualizes data in detail as a chart or a table. QFs can be launched from Information Consumer Patterns (ICPs) and the Work Center view Reports.

Compared to ICPs, Quick Filters enhance relevant functions which are needed for analytical reporting on characteristics in the Quick Filter Area.

The Quick Filter is an alternative to the Analysis Pattern and allows users to select one or more characteristics. As soon as a characteristic is selected, the report data is immediately updated. The Quick Filter offers less functions compared to the Analysis Pattern, for example users cannot define the layout of the report data. It is intended for a quick analysis by simply selecting characteristics. For example, to show top ten products (the report) sold by Akron Heating Company (company as first characteristic) purchased from supplier BuyParts (supplier as second characteristic).

Users can access the Quick Filter from the Reports view using the View With function or using the Actions function in the Information Consumer Pattern.

Consistency Rules

The Quick Filter in detail consists of the following:

1. **Toolbar Area**: Contains title and functions and allows to select a report view.
2. **Quick Filter Area**: Allows users to select one or more characteristic. After selecting a characteristic it is displayed to the right. When selecting further characteristics they are ordered from left to right.
3. **Content Area**: The user can define to display the report as a table (default), a chart or both.
1. Report Title

2. Toolbar Area:
   - Close (mandatory): Closes the window or tab.
   - Print^ (mandatory): Allows printing with the following options:
     - Table
     - Chart
     - Table And Chart
   - Export^ (mandatory): Allows exporting:
     - To Microsoft Excel: Exports the report into an Excel file.
     - To XML: Exports the report into an XML file. For more information see the Analysis Pattern.
   - Send^ (mandatory): Allows sending the report as an e-mail:
     - Attachment (XLS Table): Sends the report as an attached Excel file.
     - Web Browser Quick Link: Sends a link to the URL of the report.
     - Link (MS Excel in XML Format): Sends a link to the URL of the report as an Excel sheet in XML format. For more information see the Analysis Pattern.
   - Settings^ (mandatory): Layout options for tables and charts:
     - Characteristics: The user can select characteristics and set their order of appearance and sorting.
     - Key Figures: The user can select key figures and set their order of appearance and sorting.
     - Exceptions: The user can activate, create and edit exceptions for the table and chart view.
     - Conditions: The user can activate, create and edit conditions for the table and chart view.
     - Table: The user can set table column and sorting options.
     - Chart: The user can define options for the chart view.
   - Table And Chart^ (mandatory): The user can toggle between chart and table view:
     - Table (default): Shows the report as a table only.
     - Chart: Shows the report as a chart only.
     - Table And Chart: Shows the report as a table and as a chart.
   - View: The user can switch between the report views.
   - Selections: The user can edit and manage variables and define the start options for the report.
   - Save as Default: The user can set the current view and selection as default.

3. Quick Filter Area: Consists of two sub-sections:
   - Characteristics (left to the dotted line): Lists all report characteristics which can be selected. The characteristics are always shown and can be sorted, collapsed, or expanded.
   - Characteristics values (right to the dotted line): This section is empty by default. The user can select multiple characteristics values which will be displayed in the order of selection. Each value can be filtered, sorted, collapsed, or expanded.

4. Chart Area: Is part of the content area and shows the chart view of the report. All data is updated and displayed in real time. By default, the chart shows a predefined set of characteristics and values. The selected characteristics values are not shown in the chart area but the filters affect the data displayed in the chart. It is possible to override the default settings.
   - The chart title is created dynamically.
   - The user can switch the chart layout (such as bar chart or pie chart) clicking the chart icon on the upper right side.

5. Table Area: Is part of the content area and shows the table view of the report. The title is created dynamically. All data is updated and displayed in real time. By default, the table shows a predefined set of characteristics and values. The selected characteristics values are not shown in the table area but the filters affect the data displayed. It is possible to override the default settings.
6. **Context Menu**: The user can interact with the table data such as navigating to other reports or opening an Object Instance.

**Examples**

The following picture shows a possible implementation of the Quick Filter pattern.

![Quick Filter Pattern Example](image-url)

**More Information**

- Analysis Pattern
- Analytics
- Information Consumer Pattern
Definition: Service Map

A Service Map provides quick access to predefined activities. For example, the Self-Services view in Home provides an overview of all self-service functions that are available to the user. Furthermore, the service map is available in Work Center views where the business context calls for applications to be presented around user activities.

Consistency Rules

1. **Title**: Choose one of the following title formats:
   - `<Work Center View>` if no subviews are available.
   - `<Work Center View>: <Subview>` if subviews are available.
2. **Pictogram**: Add a pictogram, see the list of all ByD Pictograms.
3. **Heading**: Give the action group a meaningful title.
4. **On-Screen Explanation**: Give a short description of the actions available in the group.
5. **Action Link**: Provide a link for all actions the user can carry out.
   Use the following syntax for the link: `<Action Verb><Name of Destination Window>`
   The use of the action verb such as View, Edit is mandatory.
   Example: View Time Account Overview

Examples

The following screenshot is taken from an FP3.5 ByD system:
More Information

Primary Help
Interaction Models

Interaction Models

- Action Navigation
- Add and Delete Rows
- Business Configuration
- Creating Business Objects
- Editing Business Objects
- Approvals View
- Mass Change
- MDRO
- Output Management
- Save, Cancel, and Close
- Text Translation

Summary

The chapter "Interaction Models" provides guidelines for mockup development and all the information you need to design interactive dynamic procedures.

You learn how to create dialogs and flows for certain types of interaction and the right way to "Create Objects", "Change Objects", "Save Data", "Print", and "Search".

You learn about the "Navigation" paradigm and how to navigate from one "Window" to another. In addition you get introduced to the concepts of customizing ByD, called "Business Configuration".
Action Navigation

Interaction Models > Action Navigation

Page Content
Task-Based Navigation
General Navigation
Navigation via Links to Fact Sheet, Collaboration Window, Telephony, Mail Client

Task-Based Navigation

Navigation: From Task-Based OWLs to Task-Execution Floorplans

1. The Edit button opens the task-execution floorplan.
2. Clicking the task subject also opens the task-execution floorplan.

Task Region Navigation

1. Clicking the task subject opens the respective task-execution floorplan inplace.
2. Clicking the task icon opens the task details floorplan in a new window/tab.

NOTE: The subject of the task currently in focus does not have a link but is bold.

TOWL Icon Navigation
1. Clicking the attachments icon launches the BTM attachments screen.
2. Clicking the notes icon launches the BTM notes screen.
3. Clicking the task icon launches the task details screen.

General Navigation

Navigation: From Query-Based OWLs to Fact Sheets
Clicking the link in a query-based OWL launches the Fact Sheet of the object.

**Navigation: From Fact Sheets to OIFs**

1. The *Edit* button in a Fact Sheet launches either a QAF or an OIF inplace. In case a QAF is opened the user can navigate from the QAF to the object’s OIF via the *View All* button. The navigation is inplace.
2. The *View All* button in a Fact Sheet launches the OIF with the complete object data. The OIF is opened inplace which is the recommended behaviour. In rare cases it might be necessary to open the OIF in a new window/tab.
3. The *More* link navigates to a specific tab within the OIF.

**Navigation: From QAF to OIF and from OIF to QAF**
If both, QAF and OIF are defined for a BO, provide a navigation from the QAF to the OIF and vice versa.

1. On the QAF, use the View All button to navigate to the OIF
2. On the OIF, use the Basic View button to navigate to the QAF

**Navigation: From Query-Based OWLs to Editable Flooplans**

The Edit button in the OWL launches an editable floorplan, either a QAF or an OIF. If both, OIF and QAF are available, preferably open the QAF.

**NOTE:** For a read-only OIF or QAF the View button instead of the Edit button is shown.

**Navigation: From Floorplans to Related Fact Sheets**

Clicking the link in a BO floorplan launches the Fact Sheet version of the respective object.

**Navigation from Creation Floorplan to Editable Floorplan**
When creating a BO and clicking `Save` instead of `<F-Action>`, the floorplan title changes from `New <BO>` to `<BO>: <BO-Number>`, for example from `New Service Request` to `Service Request: 56398`. Buttons can change from disabled to enabled.

**Exception: Inplace Navigation from one Application to another and back**

In some rare cases it may be necessary to transfer data from another application to the calling one. If so, the:

- Calling application contains a button which calls the second application in-place, in the example the `Assign Source of Supply` button.
- The toolbar of the called application consists of `Assign` and `Cancel`. Both buttons navigate back (in-place) to the calling application. Data is either transferred (`Assign`) or not (`Cancel`). No confirmation dialog is needed.

**NOTE:** Try to avoid calling a secondary application and use a modal dialog instead.

**Navigation via Links to Fact Sheet, Collaboration Window, Telephony, Mail Client**
1. **Fact Sheet**: Links on the object ID and the description/name navigate to the Fact Sheet. Exception: If the use case requires to directly edit the object an editable OIF, QAF or GAF can be launched.

2. **Collaboration Window**: Links on person names (including employees) navigate to the Collaboration Window. Exceptions:
   - In the HCM application links on names and IDs navigate to the personnel file Fact Sheet.
   - Links on business partner names and IDs navigate to the Fact Sheet of the business partner.

3. **Telephony**: Links on the telephone number navigate to the telephony application.

4. **Email Client**: Links on the email address link to the mail client.

**More Information**

- Collaboration Window
- Fact Sheet
- Guided Activity
- Navigation Paradigm
- Object Instance
- Object Worklist
Add and Delete Rows

Interaction Models > Add and Delete Rows

Page Content
Add a Single Row
Add Multiple Rows
Delete/Remove Rows

Guidelines for UI Development
In FP3.5 it is not possible to add a row via clicking the row selector.

Add a Single Row

The user has the following possibilities to add a new row:

1. Click the Add Row button.
   The Add Row button must be the first button in editable tables. Clicking Add Row inserts an empty row with default values and moves the cursor to the first editable cell in that row.
   The row is appended before the blank row, see 3. The user can not determine where the row is inserted.
2. Click the row selector.
3. Click any cell within the blank row.
   This causes a server roundtrip which returns the default values. The users can now enter their data.
   An additional blank row is automatically appended.
4. If the focus in on the last cell, use the TAB or the ENTER key to add a blank row.

NOTE: If the user should be able define where the new row will added, for example between row 2 and 3, the application needs to define the function by itself. Use the button text Insert Row.

Add Multiple Rows
1. Put the Add Multiple button into the toolbar (instead of Add Row). Clicking the button launches a modal dialog, see Modal Dialog.

2. Within the modal dialog use a Browse and Collect pattern for selecting multiple items, see Browse & Collect. Clicking OK closes the modal dialog and transfers the selected items into the table rows. The focus on the last added row.

Delete/Remove Rows

1. You can either use the Remove or the Delete button:
   - Remove: If only the reference to the object is removed
   - Delete: If the object is physically deleted from the database. In this case a dialog window needs to be launched where the user must confirm the deletion.

2. You can not delete or remove an automatically inserted empty row.

In order to delete or remove one or more rows it/they must be selected. After deletion or removal no row is selected.

More Information

Browse & Collect
List Pane
Modal Dialog
Tables
Adobe PDF Forms

Interaction Models > Adobe PDF Forms

Page Content
Definition: Forms
Standard/Localization Form
Interactive Forms

Definition: Forms

A Form is an electronic representation of a paper form. The form is a generated portable document format (Adobe PDF®) document. It can be:

- static: the information is display-only
- interactive: the form allows entering and submitting data

Forms are used to send documents, such as purchase orders, to external business partners. They can be issued as a letter, e-mail, or fax for example. Forms can also be used for printing internal documents, such as Fact Sheets or warehouse task lists, in a comfortable layout.

There is a Form Styleguide available for Adobe Forms that should be used by everyone who needs to define or build a ByD form or to create a mock-up. You can find the Form Styleguide and other information in the Form Wiki. It includes general guidelines and covers the following form types:

For more information refer to the Form Styleguide mentioned above.

Standard/Localization Form

In order to meet the main business market requirements form templates can be delivered as generic country independent or as country specific. An Outbound Letter typically is developed with respect to the country it is used in. Item Lists and Fact Sheets usually are created and delivered as generic country independent form templates.

Country specific parts typically include changes in one or all of the following areas:

- Page size and margin / Envelope size and possible window position and size
- Sender and receiver address position, size, spaces / upright Info block and footer position
- Terminology

For each country a blueprint for the Outbound Letter is provided in the Forms Styleguide. They show an exact positioning and size of the elements used in the form - such as margins as well as the size and positioning of logo and title, sender and receiver address address, minimum and maximum visible size of the address blocks in the envelope window.

Interactive Forms
Interactive Forms are sent to customers, suppliers, or other business partners by e-mail. The receiver opens the form with Adobe Reader, enters the data (such as decisions, comments and signatures) and sends it back.

The input field is the field that expects input from the recipient. Mandatory input fields can be highlighted by Adobe Reader.
**Approvals View**

*Interaction Models > Approvals View*

---

**Page Content**

*Definition: Approvals in Managing My Area*

*Consistency Rules: Approval List*

*Consistency Rules: Approval QAF*

*Basic and Advanced Approval*

---

### Guidelines for UI Development

With FP3.5 it is not possible to show the comments and attachments of the business object in the details area of the Approvals List. Therefore the sections Comments and Attachments are not available.

---

**Definition: Approvals in Managing My Area**

One of the managers' jobs is to approve requests from their employees, for example leave requests or shopping carts which contain materials or services needed by the employees. All requests are displayed in the BTM-based approvals worklist in the **Managing My Area** Work Center.

As the requests arise from different applications but are approved by one and the same manager the approval floorplans need to be designed similar. This allows the manager to easily grasp the structure and content of the floorplans.

---

**Consistency Rules: Approvals List**

1. **Show**
   - Offer the following entries in this order: Open Tasks, <n context specific queries>, Closed Tasks

2. **Toolbar Buttons**
   - Use the following buttons to allow one click actions: Approve, Reject, Send Back for Revision

3. **Task Subject**
   - Use the following format: Approve <BO Type BO Identifier> - <BO Attribute>
   - As it is not possible to show object attributes in the table or in the preview you can show up to three attributes in the title. If so, concatenate the attributes via ".". Do not use any prepositions.
   - Example: Approve Expense Report 000031 - Kate Jacobs

4. **Context Menu**
   - Offer the following functions in this order: [Edit] [Approve] [Reject] [Send Back for Revision]

5. **Notes**
   - Show the notes history in display-only mode. The notes history combines the notes of the business object and notes of the task. See also Notes History.
6. Attachments
Use the small attachment pane, see Small Attachment Pane.

You can find information on the fields of the Advanced Find in Consistency Rules: TOWL Content.

Consistency Rules: Approval QAF

![Approval QAF diagram]

1. **Title**
   Use the following format: Approve <BO Type>: <Object Identifier>.
   Do not show additional task or business object attributes.
   Example: Approve Shopping Cart: 4711
   Do not use an Identification Region (IDR)
2. **BTM Task Bar**
   Show the name of the BTM task, the status, the priority and its due date.
3. **Toolbar**
   Show the buttons Approve, Reject, Send Back for Revision, Close, and New in the mentioned order.
   If an advanced approval is necessary, place the Advanced Approval button at the end.
   In rare cases functions like Reject or Send Back for Revision are not available.
   The respective buttons should then be disabled to avoid unnecessary feedback.
4. **Request Details**
   Mandatory fields are the business object ID (with a link to the Fact Sheet) and the contact or the requestor (with a link to the collaboration window).
   Recommended is the field Reason.
   Additionally, you can show up to five business object attributes to support the managers in making their decision.
5. **Progress**
   Plug-in that shows what happened so far and what is the current step in the process.
6. **Attachments**
   Use the small attachment pane, see Small Attachment Pane.
7. **Comments**
   Offer editable comments including the comment history. The history shows comments of the business object and the task. See also Notes History.

Basic and Advanced Approval

In most cases the manager needs to approve or reject the complete business object (basic approval). Only if the manager can approve or reject single items of a business object, another floorplan is opened (advanced approval). The navigation is inplace.
If the manager needs to approve a shopping cart, for example, they can either approve or reject the complete shopping cart in the basic approval floorplan or approve or reject single items of the shopping cart in the advanced approval floorplan.

1. On the basic approval floorplan the complete object can be approved or rejected. Clicking the Advanced Approval button launches the advanced approval floorplan inplace.
2. On the advanced approval floorplan the items of the object can be approved or rejected. The advanced approval has no progress area.
3. Basic Approval navigates back to the basic approval floorplan.

More Information

Business Task Management
Identification Region
Object Worklist
Quick Activity
Business Configuration

Interaction Models > Business Configuration

Page Content
Business Configuration: Definition
Navigation Paradigm
Consistency Rules: BC Views
Consistency Rules: Fact Sheet
Generic Function: Translate
Examples

Guidelines for UI Development
With FP3.5, it is not possible to show the fields Changed On, Changed By in BC Views.

Business Configuration: Definition

Business Configuration (BC) is the process of adapting the ByD solution to the requirements of the customer at any time in the life cycle of the solution. A separate Work Center is available which allows full access to business configuration. In addition, "immediate changes" allow changes to the business configuration directly from the relevant Work Centers during the runtime.

The functions available in the Business Configuration Work Center slightly differ between two states: Before go-live and after go-live.

BC consists of the following parts:

- **Implementation Project**: In this part the scope of the implementation is defined, using a Guided Activity. With finishing the Guided Activity, the activity list is generated.
  - Before go live: The implementation project is created with the provision of the system and the customer can directly start to work on the activities in the activity list.
  - After go live: The customers can create implementation projects on their own, to change the configuration of their system.

- **Activity List**: Is a structured collection of mandatory and critical tasks, generated from the implementation project. The tasks must be completed either before the solution can go live for the first time, or before changes can be implemented later in the solution life cycle. The activity list can also include optional activities that can be completed at any stage. The activity list covers the following sequential phases:
  - Prepare
  - Fine-Tune
  - Integrate and Extend
  - Testing
  - Go-Live

- **BC Views**: BC Views configure the behaviour and UI of ByD applications. For each activity of the activity list one or more BC Views need to be maintained. If more than one BC View needs to be maintained, they are bundled together in a Fact Sheet. Alternatively, some BC Views can be called during runtime as Immediate Change from the application Work Centers.

BC Views functions dynamically depend on the individual scope of the customer. BC Views are "attached" to the Business Adaptation Catalog (BAC) on the level of business options (n:m relation).

Navigation Paradigm

BC Views can be launched directly from the Activity List or from run-time. If more than one BC View needs to be edited for an activity you can launch a Fact Sheet instead. The Fact Sheet collects all necessary BC Views and enables the user to access the BC Views. Instead of linking to BC Views, Fact Sheets can also link to application Uls, MDRO screens or Formula Derivation Tool (FDT) screens. Unlike BC Views, these screens are opened in a separate window/tab.

If a BC View is opened from a Fact Sheet, it is opened in the same window/tab (inplace) as the sheet. Links and actions do not open new windows/tabs but stay inplace. If the BC View needs to be translated or has a second data screen, a Modal Dialog is opened.

**NOTE**: Unlike standard navigation behaviour, clicking **Save and Close** or **Save** on the BC View returns to the Fact Sheet and does not close the window/tab.

The following picture shows the navigation paradigm for BC Views:
### Consistency Rules: BC Views

BC Views are opened using a Quick Activity. Only in exceptional cases you can use a Guided Activity.

1. **Identification Region:**
   - Use the following title format: `<Activity Name>` such as Leads.
   - Show the following entries in the given order in the IDR:
     - *Version* which can either be default or customer specific. SAP Default is the default version.
     - *Changed On*, is only shown if the version is customer specific.
     - *Changed By*, is only shown if the version is customer specific.
   - *Business Option* which indicates the hierarchical path where the Business Option for the particular BC View is located. The path elements are separated via colon.

   **Example:** Financials: Financial Accounting General Ledger: Final Reporting Structure

2. **Toolbar:**
   - Show the following mandatory buttons in the given order: Save and Close, Save, Close. If the BC View needs to be translated, show also Translate. Optionally, you can add BO specific buttons.

3. **Content Area:**
   - If needed show an on-screen explanation, see Primary Help.
   - You can use any pattern within the content area, in most cases tables are used. See the respective pattern chapter for further information.
   - See the following BC View specific guidelines and information:
     - **Tables:**
       - Use the buttons Add, Delete or Remove, followed by Copy (optional) and `<BC View Actions>` (optional).
       - If a record is deleted from a table, use the button Delete. If an assignment is removed, use Remove instead.
       - A BC View action can navigate to a second level BC View which is displayed in a secondary window. When returning from this secondary window, the data is not saved. Save takes place after clicking Save or Save and Close in the primary BC View.
       - Open the filter row by default.
• Do not use radio buttons in tables.
• You can use tables which allow editing within rows. You can also use tables which only allow adding and deleting rows but no editing within the rows. The latter do not have an <Actions> button.
• Use hierarchical tables rarely. Use a Master-Detail (the first level of hierarchy would then be the master table) or Group By filters whenever possible.
• For more information see List Pane and Tables.

• **Master Detail:**
  If the master node of the underlying schema is non-extensible and the BC Set contains only one entry, the master table will change into a form.
  For more information see Master-Detail.

### Consistency Rules: Fact Sheet

A Fact Sheet enables the user to access all BC Views belonging to an activity. Fact Sheets are display-only and list all tasks. Links on the tasks launch the BC Views. You do not need to design the Fact Sheet as it is automatically created.

![Fact Sheet Diagram]

1. **Title**
2. **Toolbar:** Shows only the Close button
3. **Content Area:** Lists all BC Views for the activity. Each BC View is displayed in a section with a title, a one line on-screen explanation of the BC View function, and a link to open the BC View.

### Generic Function: Translate

If a BC View contains text which is not translated by SAP but needs to be translated by the customer you need to offer a Translate button on the BC View. For example, if the customer creates their own products they need to translate the description of the products into the languages needed. If no translation is necessary do not show the button Translate.

When the user clicks the Translate button the Modal Dialog for translation is launched. This screen does not only list the translatable fields of the BC View from which it is launched but lists all fields from all BC Views belonging to an Activity List. Therefore the translation screen contains a hierarchical structure where each node represents one BC View.

**NOTE:** Any changes on the translation screen are saved in the cache and are not stored in the database until the calling BC View is saved.

You do not need to design the translation screen as it is automatically created. See Examples below for a picture.
Examples

The following screenshots are taken from a ByD FP3.5 system.

Fact Sheet

![Screen shot of Global Settings for Payment]

BC View
Modal Dialog Translate

Creating Business Objects
Fact Sheet
Creating Business Objects

Interaction Models > Creating Business Objects

Page Content
Basics
Create Business Objects From Scratch (New)
Create Business Objects With Reference (Follow-Up, Copy, Create with Reference)
Create Business Objects From Within An Application (New)

Basics

Business Objects can either be created from scratch or by using an already existing Business Object as a reference. The fields on the create floorplan are usually empty with default values preset. If the Business Object is created with reference the data of the referenced Business Object is also preset. The create floorplan must have either all required fields on the screen or you must assure that the required fields have defined logical defaults (preferably personalizable settings).

You can use the following activity floorplans for creating Business Objects:

- GAF
- QAF
- OIF (not recommended)

Preferably use a QAF to keep it simple or use a GAF to provide guidance to the user when needed.

From Where to Create Business Objects

You can create Business Objects from the following contexts:

- Common Tasks menu of WoC (via link New <Business Object>)
- OWL (via New button in toolbar)
- QAF, OIF, GAF (via New button in the toolbar of QAF, OIF or via link in the What do you want to do next? area of the GAF confirmation step)
- Fact Sheet (via New button)
- Rarely: In creation floorplans QAF or OIF when mass creation of objects is required (Save and New button)
- Rarely: If a different Business Object than shown has to be created (You Can Also menu of OIFs or QAFs)
- When needed: Within Business Object creating or editing a Business Object of another Business Object type can be created (via New button). For example, the user creates a purchase order and within the purchase order the user can create a new supplier the purchase order will be sent to.

NOTE: Keep in mind that the term New is only used when creating a Business Object from scratch. For creating Business Objects with reference see Button and Link Labels below.

The following picture shows the standard ways of how to create a new Business Object:
Button and Link Labels

Use one of the following labels when creating a Business Object in **OWLs** and **activity floorplans**:

<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>New</td>
<td>Use it when the BO is created from scratch. You can offer different create variants within a <em>New</em> menu button.</td>
</tr>
<tr>
<td>Follow-Up</td>
<td>Use it when the BO is created as a follow-on document to a selected document. The new BO is of a different type than the referenced BO. Example: The user selects a lead and creates a sales order via the <em>Follow-Up</em> function.</td>
</tr>
<tr>
<td>Copy</td>
<td>Use it when a BO of the same BO type is duplicated.</td>
</tr>
<tr>
<td>Create with Reference</td>
<td>Use it when a modal dialog shows up where a referred object has to be selected. Example: The user creates a sales order and selects from the Modal Dialog a lead as reference.</td>
</tr>
</tbody>
</table>

In the **Common Tasks** menu and the **You Can Also** menu use a link with the format `<Label><Business Object Type>` such as *New Service Order*, see Common Task Labels.

**From Creation to Editing Floorplans**

As soon as the new object is saved, the *New* screen is exchanged with the *Edit* screen, see Navigation from Creation Floorplan to Editable Floorplan in General Navigation.

**Create Business Objects From Scratch (New)**

- Do not show an IDR initially.
  - When using a GAF you can show the IDR from the second step on filled with the information from the previous step.
  - When using a QAF or an OIF you can show the IDR after the Business Object has been saved.
- Leave the fields of the content area empty with defaults preset.
- When needed add *New* buttons behind the fields to allow for creating related objects on the fly.

**NOTE:** If you create a Business Object using an OIF do not put *Open Overview* in **You Can Also** menu.

**Create Business Objects With Reference (Follow-Up, Copy, Create with Reference)**
If the user creates a Business Object with reference via Copy or Follow-Up they have the Business Object to be referenced already selected. In this case the system can already preset the data of the reference object in the creation floorplan.

In rare cases the user launches the create floorplan without selecting the referenced Business Object first. In this case the user needs to select the referenced Business Object within the creation floorplan.

**Referenced Business Object Is Already Selected**

![Referenced Business Object Is Already Selected Diagram]

**Referenced Business Object Is Not Selected**

If the user needs to select the referenced Business Object in the creation floorplan use the following solution:

Place a Create with Reference button into the toolbar. Clicking the button launches a modal dialog where the user selects the referenced Business Object. After confirming the selection the fields of the underlying floorplan are filled accordingly.

**Create Business Objects From Within An Application (New)**
Place a New button behind a Business Object identifier field when an according object can be created from within an application.

```
<Section Group Title>
<Field Label>: <Business Object> New
<Contact>
Name: <Business Object> Name
Phone: <Business Object> Phone
```

Place the New button (or New^ menu button) behind the object identifier field. Pressing New opens the creation floorplan.

**More Information**

- Action Navigation
- Fact Sheet
- Functions & Menus
- Guided Activity
- Navigation Paradigm
- Object Instance
- Object Worklist
- Save, Cancel, and Close
Editing Business Objects

Editing: From OWL to QAF/OIF

From a query-based OWL the user has two possibilities to edit an object:

- Navigating to the Fact Sheet and clicking the **Edit** or **View All** button
- Selecting the object within the OWL and clicking the **Edit** button

Editing: From QAF to OIF

According to progressive disclosure let the user start editing an object in a simple QAF whenever possible. When necessary provide a **View All** button so that the user can navigate to an OIF with full editing capabilities.

Complete Edit Navigation Model

For quick access of an editable floorplan from an OWL, provide an **Edit** button within the OWL toolbar.

The following use cases have to be distinguished (OWL):

- Only a QAF is available: **Edit** opens the QAF
- Only an OIF is available: **Edit** opens the OIF
- Both, QAF and OIF are available:
  - If the OIF contains a tab which matches the QAF: **Edit** opens the OIF
  - Otherwise decide whether **Edit** opens the QAF or OIF.
- If the use case requires that the user needs to select either the QAF or OIF directly from the OWL toolbar, provide an **Edit^* menu button with the following options in the given order: All (opens the OIF) and Quick, (opens the QAF)
The following picture shows the complete navigation model:

Legend:
- Standard Navigation Path
- Optional Navigation Path
- One Window / One Tab

Examples
The example shows the recommended navigation path from an OWL via Fact Sheet to QAF and OIF. It also shows the back navigation from QAF and OIF back to the Fact Sheet as well as the navigation between QAF and OIF.
**More Information**

Creating Business Objects
Fact Sheet
Guided Activity
Object Instance
Object Worklist
Quick Activity
Mass Change

Interaction Models > Mass Change

Page Content
Basics
Use Cases and Recommended Floorplans
Mass Change Using a Quick Activity
Mass Change Using a Modal Dialog

Basics

Mass change allows users to change a field value in many BOs or items at once without opening the single BO or item. The value can either be changed by entering a concrete value (such as changing the responsible purchaser from Peter Greene to Arthur Major) or a formula (such as increase prices by 5%). Fields with blank values are ignored and not changed.

Usually, the user selects the BOs or items to be changed in the OWL or a table within an activity floorplan.

Examples for mass change are:
- Changing the start or end date for a group of activities in the same project
- Approving multiple items with the same approval code
- Changing the responsible purchaser for purchase orders

Floorplans

You can use the following floorplans for mass changes:
- **QAF**: Contains one table for selection and change
- **Modal Dialog (MD)**: Contains the fields to be changed. Selection needs to be done on the floorplan from which the modal dialog is launched.

**NOTE**: You can also use GAFs (no best practices available) and custom UIs for exceptional cases which are not supported by the standard. Additionally it is possible to use the export to and save from Excel function for carrying out mass changes, see [Office Integration](#). 

Wording

Use the following wording:
- Use the button *Mass Change* to evoke the floorplan for mass change.
- Use the title format *Mass Change: <Noun>* for the mass change floorplan, example: *Mass Change: Materials General Data*.
- Use the button *Apply Mass Change* to carry out the changes.

Use Cases and Recommended Floorplans

You can use the following floorplans per use case:

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Recommended Floorplan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change one attribute in multiple BOs to the same value</td>
<td>MD, QAF</td>
</tr>
<tr>
<td>Change one attribute in multiple BOs to multiple values</td>
<td>QAF</td>
</tr>
<tr>
<td>Change multiple attributes in multiple BOs to the same value per attribute</td>
<td>MD, QAF</td>
</tr>
<tr>
<td>Change multiple attributes in multiple BOs to the multiple values</td>
<td>QAF</td>
</tr>
</tbody>
</table>

Mass Change Using a Quick Activity

You can use a QAF for mass change. Select the rows you want to include in the mass change before you click the *Mass Change_* button on the appropriate table.
1. Include Save and Close, Save, and Close buttons.
2. The Show dropdown listbox allows to switch between different sets of fields.
3. The Apply Mass Change menu button replaces the values of selected objects with the new values. The new values are saved to the database with either Save or Save and Close. The Apply Mass Change menu button has the following entries:
   - All Items: all rows will be affected by the mass change
   - Selected Items: only the rows you have selected manually will be modified by the mass change.
4. The New Value row in the table allows to enter new values for the displayed fields.

NOTE: Put the tooltip For Mass Change Row on the header of the second column. Put the tooltip Values for Mass Change on the cell containing the text New Value.

Mass Change Using a Modal Dialog

You can use a modal dialog containing the fields to be changed.

NOTE: A modal dialog cannot be used to clear data from a data entry field. This must be done by a user either manually or via a command used specifically for clearing information from a field.

More Information

Guided Activity
MDRO
Modal Dialog
Quick Activity
MDRO
Interaction Models > MDRO

Page Content
Definition: Mass Data Run Object
General Information
Consistency Rules: MDRO OWL
Consistency Rules: Create QAF

Definition: Mass Data Run Object

A Mass Data Run Object (MDRO) is used to execute an automatic mass processing of a business transaction. For example, the invoice clerk can define and run an MDRO for invoices: The system creates invoices for suppliers AMS and Miller & Son on a weekly basis without the need for any manual action of the invoice clerk.

General Information

The following guidelines focus on the MDRO OWL and the QAF which is used to create an MDRO. In rare cases you can use an OIF or GAF to create an MDRO. The floorplan structure for editing an MDRO follows the structure of the creation MDRO. Neither creation via OIF or GAF nor the generic scheduling and job monitor screens are mentioned in the guidelines.

Consistency Rules: MDRO OWL

Do only label buttons, fields, and column titles as shown in the picture.

1. **Title**: Use the term Runs within the OWL title, for example Demand Planning Runs.
2. **Show Dropdown Listbox**: Use the following entries in the given order:
   - Active <BO name> Runs
   - <BO name> Runs in Preparation
   - <BO name> Runs in Revision
   - Obsolete <BO name> Runs
   - All <BO name> Runs
3. **Group By Dropdown Listbox**: Use the following entries in the given order:
   - None
   - Status
4. **Toolbar**: Put the following mandatory buttons in the given order into the toolbar:

   - Edit
   - New
   - Delete
   - Schedule
   - View Jobs
   - Actions

   The picture shows also all possible optional buttons and their order.

   **NOTE**: The Copy button opens a new screen with the data of the selected run already preset, see Creating Business Objects.

5. **New Button**: Use the following entries:

   - <BO Name Run>
   - Task
   - Notification
   - Alert
   - Clarification Request

6. **Actions Button**: Use the following entries:

   - Set to Active
   - Set to Obsolete
   - Undo Obsolete

7. **Table**: Keep the table structure as shown in the picture.

   Define additional columns as hidden so that the user can display them via personalisation. You must define Changed By and Changed On in this order as hidden columns.

8. **Details Table**: Keep the structure of the table in the details area exactly as shown in the picture. Define Execution ID and Background Job ID as hidden columns. Define all other columns also as hidden.

   **NOTE**: If you want to display fields in the details area which are not part of the table, use a section group above the details table.

9. **Details Show Dropdown Listbox**: Use Show to limit the number of displayed log files.

   Possible queries are:

   - For all application areas: Last 5 Executed Logs, Last 100 Executed Logs, All Logs
   - Financials (FIN) specific: Today's Logs, Last 7 Days' Logs, Current Month's Logs, Last 3 Months' Logs, All Logs

   Place the All query at the end.

10. **Advanced Find Form**: Use the sequence and position of search fields shown in the picture.

    **Exception**: The Financials application has MDROs which need to differ because of specific use case and legal reasons (Adjustment Runs), therefore they do not follow these guidelines.

---

### Consistency Rules: Create QAF

Do only labels buttons, titles, fields as shown on the picture. Structure the content area as shown on the picture.

---

1. Use the title format New <BO name> Run, for example, New Invoice Run.
2. Display always the IDR with the Status information.
3. Use the following buttons in the given order:
   - [Save and Close] [Save] [Close] [Schedule] [Set to Active] [Check Consistency]
   - Schedule saves and activates the MDRO and opens the schedule activity.
   - Set to Active sets the status of the MDRO to active.
   - Use Check Consistency only for MDROs which have a consistency check implemented.
4. Use the following groups in the content area:
   - **General Data**: Display the fields Status, Run ID, and Run Description.
   - For adjustment runs: The field Run ID is not necessary as it is automatically created by the system.
   - **Control Parameters**
Show this group only if control parameters are available.

Examples:
- Run mode: Indicates whether the run is a simulation run only
- Exception rule: Defines if only incoming checks from all selected customers should be considered in the run.

- **Selection Criteria**
  Show the selected parameters such as the customer range or the product range for this MDRO.

- **Administrative Data**
  Is only shown after the MDRO has been created.

  For adjustment runs: Do not show the fields Changed On and Changed By as the adjustment runs can not be changed.

---

**More Information**

- Mass Change
- Object Worklist
- Quick Activity
Output Management

Output Management
The customers can define how business objects, such as purchase orders, are transferred to their business partners, such as suppliers. For example, they can e-mail or fax the business object electronically or first print them out and send the paper.

Backend Output vs Local Output

Backend output means that the business object is transferred to an external business partner. The status of the business object is changed in the ByD system, for example from In Preparation to Sent. Opposite is local output which means that the business object is printed or faxed etc. for internal purposes; the status does not change.

Backend Printing

Automatically and Manual Printing

Backend printing can either be done automatically or manually via the ByD UI.

For automatic printing it is a prerequisite that ByD desktop applications are installed at the customer's desktop:

- Print Manager: Is used for central printing, that means the key user defines the printers.
- Collaboration Window: Is used for personal printing, that means each user can define a printer. For example, a purchaser defines to print purchase orders or requests for information on a printer in his office.

The customer can combine automatic and manual printing.

Print Process

The business objects are not directly printed but collected in a printer queue. In Business Configuration it is defined which business objects are collected in which printer queue. For example, all purchasing documents are collected in one queue and customer invoices in another queue.

Printing works as follows:

1. The user clicks the application button for transferring business objects, such Order for transferring purchase orders to suppliers.
2. The business object(s) are stored in printer queues.
3. In case of:
   - **Automatic printing**: The ByD desktop application checks regularly if the printer queue(s) contain business objects. If so they are printed on the printer(s) defined in the desktop application.
   - **Manual printing**: From Home, the user selects Work --> Manual Print Tasks. All business object the user needs to print are shown. The user selects a business object and prints via the standard print dialog window.

Accessing Printer Queues
The following picture shows the different ways how customers can access the printer queues:

**Preview, Print, Send, Print List, Export**

Output Management provides the following functions:

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
<th>Consistency Rules</th>
</tr>
</thead>
</table>
| **Preview**| - Used for template based output  
- Opens a new window which shows the business object in Adobe PDF® format  
- If more than one template is available, a modal dialog is shown. The user can select a template.  
- Within the PDF window the user can Print or send the form locally via the Adobe functions. Local output means that the business object is printed or sent within the company. It is not sent to an external business partner. | - Do not use a menu button.  
- Label the button *Preview*.                                                                                                                   |
| **Print**  | - Used for printing the current screen  
- For local printing                                                                                                                                 | - Do not use a menu button  
- Label the button *Print*.                                                                                                                     |
| **Send*^** | - Used only in Analysis Pattern for local sending, see Analysis Pattern.  
- Opens a modal dialog with an e-mail form                                                                                                        | - Use a menu button *Send* with the following entries: As E-Mail Attachment, As E-Mail Link         |
| **Print List** | - Opens a new window which shows the list in Adobe PDF format  
- The complete query result is shown                                                                                                             | - Label the button *Print List*.                                                                     |
Export

- Used for exporting lists, for example to Microsoft Excel
- Calls the download function of the browser. Example: In Internet Explorer the dialog window “File Download - Do you want to open or save this file” is launched.
- The complete query result is downloaded in the selected file format.

- Use the following syntax for the menu entries:
  To <company name of application> <file type name>, example To Microsoft Excel. Do not use the file extension such as xls.
- Do not use multiple Export buttons but combine them into a menu button.
- If only one export function is available, the menu is removed, see Menu Buttons.

Besides these output buttons each application can trigger a backend output via an application specific button like Send to Bidder. Backend output means that the business object is delivered to an external business partner, such as a purchase order is delivered to a supplier via the Order button. Label the buttons suitable to the application area such as Submit, Order, Send to Bidder.

### Button Usage and Placement

<table>
<thead>
<tr>
<th>Output Function</th>
<th>Where to Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preview</td>
<td>OIF, QAF, GAF Confirmation Step, Fact Sheet, OWL</td>
</tr>
<tr>
<td>Print</td>
<td>Any floorplan</td>
</tr>
<tr>
<td>Print List</td>
<td>OWL, tables</td>
</tr>
<tr>
<td>Export</td>
<td>OWL, tables, Analysis Pattern</td>
</tr>
<tr>
<td>Send</td>
<td>Analysis Pattern</td>
</tr>
</tbody>
</table>

If form templates are available it is recommended to use the Preview button in OIFs and QAFs. In Fact Sheets it is recommended to use Preview, if template based print is needed.

For information on button placement see Button Placement in Toolbars (QAF, OIF, GAF, Fact Sheet, Modal Dialog).

### Output History Tab in OIF

Output History shows a list of accomplished backend output (mandatory when backend output is needed). The user can resubmit an already sent business object.

The following screenshot shows a Schema of the Output History as well as the Resubmit Modal Dialog:
The output settings for backend output are defined in the system, for example it is defined that all requests for quotation are sent via fax. If the users want to change the output settings for the current business transaction, they use the Edit Output Settings function. Edit Output Settings can either be placed in the toolbar or in the You Can Also menu.

**Examples**
The following screenshot is taken from an FP3.5 ByD System. It shows a preview screen. The user can use the native Adobe print and send functions for local output.

The following screenshot is taken from an FP3.5 ByD System.
Save, Cancel, and Close

Interaction Models > Save, Cancel, and Close

Page Content
Ways of Saving Data
Saving Data in QAFs and OIFs
Saving Data in GAFs
When to Use Cancel and Close

Ways of Saving Data

Data can be saved in the following ways:

- **On the user's local machine.** No other user than the creator can work on the object. Incomplete data can be saved. Use the **Save Draft** button.
  
  **NOTE:** **Save Draft** is no generic function. If needed, the application needs to implement the function by itself.

- **On the database.** Every authorized user can work on the object. Use the following buttons:
  
  - **Save:** The system checks whether the data is correct and complete. If so, the data is saved on the database, the floorplan stays open and editable. If not, the system displays error messages and does not save the data.
  
  - **Save and Close:** The system checks whether the data is correct and complete. If so the data is saved on the database and the floorplan is closed. If not, the system displays error messages and does not save the data. The floorplan stays open.
  
  - **<F-Action>, such as Post, Publish, Release:** Behaves like **Save and Close.** Additionally a follow-on process is triggered. For example, if a purchaser creates a request for quotation (RFQ) and publishes it, the follow-on process "Send RFQ to suppliers" is triggered.

![Diagram](image)

Saving Data in QAFs and OIFs

Saving Master Data and Transactional Data

Depending on the type of business object to be created or changed you need to use different buttons. Master data is the fundamental data of a company which is regularly used and seldom changed, for example products, customers, and suppliers. Transactional data is short-lived, for example purchase orders and sales orders.
Use either Save and Close (for master data) or <F-Action> (for transactional data). The data is saved and the window is closed. 

Additionally you can use Save and New. In this case the data of the current BO is saved and the floorplan changes to new mode. The success message that the current object is changed is also displayed in this floorplan.

Use always Close.

Use always Save. The data is saved and the window stays open. In exceptional cases you can additionally use <F-Action>.

Additionally you can use Save and New. In this case the data of the current BO is saved and the floorplan changes to new mode. The success message that the current object is changed is also displayed in this floorplan.

Use always Close.

The following table shows the consequences when clicking Save, <F-Action> or Save and Close, and Close in **new mode**:

<table>
<thead>
<tr>
<th>Function</th>
<th>Data complete</th>
<th>Data incomplete</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No error messages</td>
<td>Error messages</td>
</tr>
<tr>
<td><strong>Save</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Saves BO</td>
<td>Displays error messages</td>
</tr>
<tr>
<td></td>
<td>Changes to &quot;Edit&quot; mode</td>
<td>Does not save the BO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stays in &quot;New&quot; mode</td>
</tr>
<tr>
<td><strong>&lt;F-Action&gt; or Save and Close</strong></td>
<td>Saves the BO</td>
<td>Displays error messages</td>
</tr>
<tr>
<td></td>
<td>Triggers the follow-on process (only for &lt;F-Action&gt;)</td>
<td>Does not save the BO and does not trigger any process</td>
</tr>
<tr>
<td></td>
<td>Closes the window</td>
<td>Stays in &quot;New&quot; mode</td>
</tr>
<tr>
<td></td>
<td>Displays success message on calling screen</td>
<td></td>
</tr>
<tr>
<td><strong>Close</strong></td>
<td>Closes the window. If unsaved data is available a confirmation dialog is shown, see Consistency Rules: Warning of Data Loss</td>
<td>Closes the window. If unsaved data is available a confirmation dialog is shown, see Consistency Rules: Warning of Data Loss</td>
</tr>
</tbody>
</table>

The following table shows the consequences when clicking Save, <F-Action> or Save and Close, and Close in **edit mode**:

<table>
<thead>
<tr>
<th>Function</th>
<th>Data complete</th>
<th>Data incomplete</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No error messages</td>
<td>Error messages</td>
</tr>
<tr>
<td><strong>Save</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Saves BO</td>
<td>Displays error messages</td>
</tr>
<tr>
<td></td>
<td>Stays in &quot;Edit&quot; mode</td>
<td>Does not save the BO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stays in &quot;Edit&quot; mode</td>
</tr>
</tbody>
</table>
<F-Action> or Save and Close

- Saves the BO
- Triggers the follow-on process (only for <F-Action>)
- Closes the window
- Displays success message on calling screen

- Displays error messages
- Does not save the BO and does not trigger any process
- Stays in "Edit" mode

Close

Closes the window.
If unsaved data is available a confirmation dialog is shown, see Consistency Rules: Warning of Data Loss

Closes the window.
If unsaved data is available a confirmation dialog is shown, see Consistency Rules: Warning of Data Loss

Saving Data in GAFs

Saving Master Data and Transactional Data

Saving data in GAFs differs from QAF and OIF as follows: For saving master data use the Finish button, for transactional data use <F-Action>. In both cases the data is saved and the Confirmation step is shown.

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Review Step</th>
<th>Confirmation Step</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous</td>
<td>Next</td>
<td>Previous</td>
<td>Next</td>
</tr>
</tbody>
</table>

NOTE: The Finish or <F-Action> button can be active from that step on where all mandatory data is entered which is not necessarily the Review step. Use Cancel on all steps except the Confirmation step. Use Close on the Confirmation step.

GAF Button Function

The following table shows the consequences when clicking Finish, <F-Action> and Cancel. As Close is only available after the data has been saved successfully it simply closes the window.

<table>
<thead>
<tr>
<th>Function</th>
<th>Data complete</th>
<th>Data incomplete</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No error messages</td>
<td>Error messages</td>
</tr>
<tr>
<td>Finish or &lt;F-Action&gt;</td>
<td>Saves BO</td>
<td>Displays error messages</td>
</tr>
<tr>
<td></td>
<td>Moves to Confirmation step</td>
<td>Does not save the BO</td>
</tr>
<tr>
<td></td>
<td>Triggers the follow-on process (only for &lt;F-Action&gt;)</td>
<td>Stays in &quot;New&quot; mode in current step</td>
</tr>
<tr>
<td>Cancel</td>
<td>Closes the window. If unsaved data is available a confirmation dialog is shown, see Consistency Rules: Warning of Data Loss</td>
<td>Closes the window. If unsaved data is available a confirmation dialog is shown, see Consistency Rules: Warning of Data Loss</td>
</tr>
</tbody>
</table>

When to Use Cancel and Close

Both, the Cancel and the Close button, discard any changes, close the screen and return the user to the calling application or work center. Depending on where the screen is launched, either Cancel or Close is used. Do never use both in one floorplan.

- Use Cancel if the screen is launched within a process chain. This applies to GAFs as well as editable modal dialogs:
  - As each step of a GAF represents a step within the process chain, use the Cancel button on all steps except the Confirmation step. As the Confirmation step is displayed after the process is finished use the Close button here.
  - Modal Dialogs also pop up within a process chain. For example, Modal Dialogs can be introduced within a delete process to ask for confirmation: Are you sure you want to delete the selected item? They can also pop up in a create or change process to allow the user to enter additional data.
- Use Close if the screen is not launched within a process chain. This applies to editable and read-only QAFs and OIFs as well as Fact Sheets, and read-only Modal Dialogs.

Whenever the user has entered or changed any data and clicks Cancel or Close the system launches a confirmation dialog; if no changes have been made and in read-only mode the screen is closed without any confirmation dialog.
More Information

Confirmation Dialog
Functions & Menus
Guided Activity
Modal Dialog
Object Instance
Quick Activity
Text Translation

Interaction Models > Text Translation

Page Content
Definition: Language Dependent Text
Consistency Rules: Translation of Short and Long Texts
Consistency Rules: Translation of Notes
Examples

Definition: Language Dependent Text

Language dependent texts allow to maintain texts in different languages independent from the user's logon language. This applies to multiple master data objects as well as to other areas.

Texts can be:

- Short and long texts
- Notes

Consistency Rules: Translation of Short and Long Texts

1. If the translation table is displayed in a tab, label the tab Other Languages.
2. Put a dropdown list in the first column that contains the languages into which the text can be translated. Label the column Language.
3. Put a text input field in the second column for translating the short text. Label the column <Object Short Text to be Translated>, such as Material Description.
4. Use a details area with a textbox for translating the long text. Label the area Details: <Language>, example Details: English

Consistency Rules: Translation of Notes

1. Offer a dropdown listbox that contains all languages that have already been maintained. Label the field Language.
2. Place an Add^ menu button behind the field. The menu button contains all languages into which the note can be translated.
3. Place a Delete button next to the Add^ button.
Examples

The following screenshots are taken from an FP3.5 ByD system.

Translation screen for short and long text of materials:

![Translation screen for short and long text of materials](image1.png)

Translation screen for sales notes:

![Translation screen for sales notes](image2.png)

More Information

Business Configuration
Notes
Wording
Specific Topics

Summary
This chapter explains the right usage of controls, positioning of elements, appropriate usage of texts and answers many detailed questions which may occur in your daily design efforts.
Forms & Fields

Specific Topics > Forms & Fields

Page Content
Forms: Newspaper Layout
Forms: Number of Fields per Section Group
Forms: Names of Persons and Technical User IDs
Forms: Addresses of Organizations and Persons
Forms: Administrative Data
Forms: General Information
Forms: Links without Field Labels
Fields: Visualization Mode (Edit, Read, Display)
Fields: Length
Fields: Melting
Fields: Alignment of Values
Fields: Mandatory
Fields: Checkboxes
Fields: Radiobuttons
Eventing/Dynamic Forms
Status

Forms: Newspaper Layout

The layout in forms is described in Tab Chain.

Forms: Number of Fields per Section Group

Avoid to use more than 9 fields per section group. Give section groups a meaningful title, see Avoid Redundancy between Group Titles and Field Labels.

Names of Persons and Technical User IDs

For how to visualize names in editable mode, see Visualization in Melting Fields, Separate Fields, or One Field.

Standard: Display of Names

Names in general are displayed without the person's ID.

Examples:

<table>
<thead>
<tr>
<th>Administrative Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Created By:</td>
</tr>
<tr>
<td>Created On:</td>
</tr>
<tr>
<td>Changed By:</td>
</tr>
<tr>
<td>Changed On:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Created By</th>
<th>Created On</th>
<th>Changed By</th>
<th>Created On</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;Last Name&gt;, &lt;First Name&gt;</td>
<td>&lt;Date&gt; &lt;Time&gt;</td>
<td>&lt;Last Name&gt;, &lt;First Name&gt;</td>
<td>&lt;Date&gt; &lt;Time&gt;</td>
</tr>
<tr>
<td>Jackson, Kate</td>
<td>03/15/2010 05:36 PM</td>
<td>Jackson, Kate</td>
<td>03/15/2010 05:36 PM</td>
</tr>
</tbody>
</table>

Exception: Display of Names in Accounting Relevant Business Objects

Due to lawful reasons (compliance) you must display the Backend ID (also called Technical ID which is the 12 character ABAP user name) in the field values of Changed By and Created By in all accounting relevant business objects. Place the ID, such as
In brackets behind the name. This applies to forms and tables. Do not use the Employee ID like MC1645 or the Logon User ID like JGoldman.

Examples:

### Administrative Data

<table>
<thead>
<tr>
<th>Created By:</th>
<th>Created On:</th>
<th>Changed By:</th>
<th>Changed On:</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;First Name Last Name (Backend ID)&gt;</td>
<td>&lt;Date&gt; &lt;Time&gt;</td>
<td>Kate Jackson (0987ODKGOLD3)</td>
<td>03/18/2010 01:20 PM</td>
</tr>
</tbody>
</table>

### Display of Names in Forms, Titles, Preview Panes, and IDR

In forms, titles, preview panes, and IDRs display names of persons as `<First Name Last Name>`.

**Example:**

Requester: Kate Jackson

### Display of Names in Tables

Tables provide functions to sort a column and to filter columns. Thus, depending on the use case, different variants to display names are possible.

It is recommended to display the name of a person as `<Last Name, First Name>` to allow for sorting according to the last name and to better support searching and filtering with wildcards: The user can enter `S*`, for example, to find all persons whose last name begins with `S` or `M*` to find all persons whose first name begins with `M`.

**Example:**

<table>
<thead>
<tr>
<th>Employee ID</th>
<th>Employee Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;ID&gt;</td>
<td>&lt;Last Name, First Name&gt;</td>
</tr>
<tr>
<td>5119840</td>
<td>Jackson, Kate</td>
</tr>
</tbody>
</table>

Exceptions:

- If the use case requires to sort or personalize (hide or show) first name and last name separately use two columns.
- If the name is address related, meaning `<First Name Last Name>` coming together with address information, or just secondary information display `<First Name Last Name>`.

### Field Labels and Column Headers for Names

Label the field or column header as specific for persons as possible, such as `Employee, Customer, Manager, Requester`. If no specific label is possible use `Name`.

Avoid labels like `Employee Name, Customer Name`. Exception: When the name field comes together with an ID field add `Name` to the label.

**NOTE:** In address related section groups and in the ticket area of IDRs do not display an additional label, just display the name.

### Technical User IDs (System)

If the user is not a person but a technical user, display `System`. Do not display the technical ID.

### Addresses of Organizations and Persons

The guidelines for the arrangement of address fields differ slightly between addresses of persons and addresses of organizations. See Addresses for a description.
Administrative Data

The Administrative Data section group informs the user when a business object was created and changed and by whom. Use the following layout:

<table>
<thead>
<tr>
<th>Administrative Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Created By:</td>
</tr>
<tr>
<td>Created On:</td>
</tr>
<tr>
<td>Changed By:</td>
</tr>
<tr>
<td>Changed On:</td>
</tr>
</tbody>
</table>

- Show the fields in one column as one section group with the title Administrative Data.
- Order the fields as follows: Created By, Created On, Changed By, Changed On
- For names: Display the full name. Exception: For all accounting relevant business objects display also the Backend ID in brackets behind the name, see Display Names of Persons.
- For time: Display date and local time (according to the user’s settings) without time zone in a melting group.

General Information

Use the section group title General Information if you want to group generic fields of a business object. Do not use General or General Data.

<table>
<thead>
<tr>
<th>General Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Category:</td>
</tr>
<tr>
<td>Base Quantity:</td>
</tr>
<tr>
<td>List Price:</td>
</tr>
<tr>
<td>Bought – In Part:</td>
</tr>
<tr>
<td>Inhouse Production:</td>
</tr>
</tbody>
</table>

Forms: Links without Field Labels

Linking to Display-Only or Read-Only Floorplans

If you want to open a display-only or read-only floorplan, such as reports or changes, do not use a field label. Show the link only.

- If the link (or links) refers to all section groups within the form:
  - Use a section group titled View More for placing the links.
  - In the details area of an OWL, place the section group before Administrative Data.
  - In all other forms, the section group is the last one.
  - Do not repeat the term View in the link text. Label the link Usage of Overhead Rate, for example.
If the link (or links) refers to a specific section group, put the link at the bottom of the section group. Label the link View <Content>, for example View Usage of Overhead Rate.

**Linking to Editable Floorplans**

Usually you use buttons for carrying out actions and launching editable floorplans, see Navigation via Links and Buttons. If the user needs to launch a window for editing data that refers to a complete section group, use a link without a field label instead. Put it at the bottom of the section group. Label the link as precisely as possible. Start with a a verb to indicate that an action is carried out.
If you want to put rarely used fields in a separate window, proceed as follows:

- If you show the additional fields in the window, label the link `Edit Additional Fields` and open a Modal Dialog with the title `<Section Group>: Additional Fields.
Example: The section is labeled `Supplier`. The title of the dialog window is `Supplier: Edit Additional Fields`.
- If you show all fields in the window, label the link `Edit All Fields` and open a Modal Dialog with the title `<Section Group>: Edit All Fields. For an example see `Forms: Addresses of Organizations and Persons`.

**NOTE:** If an action belongs to a specific field in a form, place the button directly next to the field, see `Button Placement in Forms`.

### Fields: Visualization Mode (Edit, Read, Display)

Fields can appear in the following visualization modes:

<table>
<thead>
<tr>
<th>Example</th>
<th>Visualization Mode</th>
<th>Use it when</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description: <code>&lt;Description&gt;</code>&lt;br&gt;Date: <code>&lt;Date&gt;</code></td>
<td>Editable</td>
<td>the user can enter data.</td>
</tr>
<tr>
<td>Description: <code>&lt;Description&gt;</code>&lt;br&gt;Date: <code>&lt;Date&gt;</code></td>
<td>Read-Only</td>
<td>the field is usually available for editing but is disabled in the current context (example: another user has opened the same floorplan to edit data or the user does not have the permission to edit the data).</td>
</tr>
<tr>
<td>Description: <code>&lt;Description&gt;</code>&lt;br&gt;Date: <code>&lt;Date&gt;</code></td>
<td>Display-Only</td>
<td>a field is never editable.</td>
</tr>
</tbody>
</table>

- Fact Sheets and the OWL details area are always completely in display-only mode.
- OWL and TOWL are always in read-only mode. (The OWL and TOWL visualization differs from other read-only tables.)

### Fields: Length

Usually you do not need to take care about the length of fields because the length is automatically rendered relating to the type of the field. For each field type a default length is defined, for example the length of date fields is 12 ex and the length of IDs is 17 ex.

In rare cases it is required to overwrite the default. Example: The default length for an identifier is 17 ex. If an application decides to introduce identifiers that are longer the default can be changed.

### Fields: Melting

#### Values and Units

Display values and their respective units (currencies or units of measurement) always in a melting field. The unit is *not* part of the field label, for example do *not* design a label like `Amount (USD)`.

Usually, display units with their abbreviations, at least for editable fields. For more information on when to use abbreviations see `Value Help`.

<table>
<thead>
<tr>
<th>Example</th>
<th>Visualization Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Amount: <code>&lt;Amount&gt;</code> <code>&lt;Currency&gt;</code></td>
<td>Editable</td>
</tr>
<tr>
<td>Total Amount: <code>&lt;Amount&gt;</code> <code>&lt;Currency&gt;</code></td>
<td>Read-Only</td>
</tr>
<tr>
<td>Total Amount: <code>&lt;Amount&gt;</code> <code>&lt;Currency&gt;</code></td>
<td>Display-Only</td>
</tr>
</tbody>
</table>
Date and Time
Use a melting field when displaying date and time, see Date & Time.

Fields: Alignment of Values
In forms align fields as follows:

- Right-align amounts and decimal numbers
- Left align all remaining fields and icons

Example:

<table>
<thead>
<tr>
<th>Status:</th>
<th>![Image]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Value:</td>
<td>&lt;Value&gt; USD</td>
</tr>
<tr>
<td>Purchasing Unit:</td>
<td>&lt;Unit&gt;</td>
</tr>
</tbody>
</table>

For the alignment in tables, see Alignment of Content and Column Headers.

Fields: Mandatory
Fields are mandatory if they are required for saving data or the execution of a finalizing action.

Indicate mandatory fields in editable mode with a red asterisk behind the label. If a melting group contains a mandatory field, the label of that group gets an asterisk as well:

Account

<table>
<thead>
<tr>
<th>Account:</th>
<th>![Image]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>![Image]</td>
</tr>
<tr>
<td>Address:</td>
<td>![Image]</td>
</tr>
</tbody>
</table>

Do not display the asterisk in read-only or display-only mode:

Account

<table>
<thead>
<tr>
<th>Account:</th>
<th>&lt;Account&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>&lt;Name&gt;</td>
</tr>
<tr>
<td>Address:</td>
<td>&lt;Address&gt;</td>
</tr>
</tbody>
</table>

Fields: Checkboxes
You can either place the checkbox label on the right or on the left of the checkbox.

When to put the label left
If one or two checkboxes are part of a section group within a form, put the checkbox right and the label left.
When to put the label right
If the checkboxes build an own group or three or more checkboxes are part of a section group within a form, put the checkbox left and the label right.

Disabled Checkboxes
Use the following disabled checkboxes for read-only tables:

<table>
<thead>
<tr>
<th>Purchased</th>
<th>In-House Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>

Use the following disabled checkboxes within display-only forms:

- ✔ Purchased
- ✔ In-House Production

Verbal (display-only) checkboxes
Use them

- for text like cases only
- within the IDR

Evaluated Receipt Settlement: Yes

Checkboxes in Find Form Panes
Use a tri-state checkbox to enable searching for both values (checked and unchecked).

Fields: Radiobuttons
Radio buttons are related by topic and provide the user the option to select a single exclusive choice from an offering of two or more choices. The guidelines for radiobuttons are similar to Checkboxes. The differences are mentioned in this section.

Alignment
Place radiobuttons left and the label right.
Verbal radio buttons have to be placed right to the label. They can only appear display-only.

For more information see also Form Pane.

Eventing/Dynamic Forms

Relationship between Fields

In many business contexts, fields relate to each other. If the user selects an entry from a dropdown listbox, selects a checkbox or a radiobutton, the system can prepopulate associated fields as well as hide or show fields.

Example

The following example shows the enabling (showing) of fields depending on the selection of the Payment Terms and the Payment Type:

Status

Definition

A status is an attribute of a business object (BO) describing its state from a business process perspective. It indicates:

- Summarized BO information (such as Financial Data Complete)
- The lifecycle of a BO (such as New, In Process, Complete)
- Prerequisite of a processing step (such as Released, Approved)
- The result of a processing step (such as Delivered, Sent)
- The next logical processing step (such as In Planning, In Process)

We distinguish two types of status variables:

- Transition based (such as To Be Planned, To Be Executed, To Be Completed)
- State based (such as Planned, Executed, Completed)

Where Do Status Show Up?

Status are displayed in:

- OWL
- QAF, OIF, GAF within a form or within a table
- IDR of a Fact Sheet, OIF, QAF, GAF on the left side, see Identification Region
Example OWL Table:

<table>
<thead>
<tr>
<th>Status</th>
<th>&lt;Table Header&gt;</th>
<th>&lt;Table Header&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;Status&gt;</td>
<td>&lt;Content&gt;</td>
<td>&lt;Content&gt;</td>
</tr>
<tr>
<td>In Preparation</td>
<td>&lt;Content&gt;</td>
<td>&lt;Content&gt;</td>
</tr>
<tr>
<td>Open</td>
<td>&lt;Content&gt;</td>
<td>&lt;Content&gt;</td>
</tr>
</tbody>
</table>

Example IDR:

**Status:** Open  **Account:** Akron Hearing Technologies Inc  **Net Value w/o Freight:** 1,515.20 USD  **Total:** 1,515.20 USD

**Changing a Status**

You can design status changes as follows:

<table>
<thead>
<tr>
<th>Use a...</th>
<th>Where</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menu button <strong>Change Status</strong>³</td>
<td>Toolbar of OWL tables</td>
<td>Change Status</td>
</tr>
<tr>
<td></td>
<td>Toolbar of item tables</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Toolbar of QAF, OIF, GAF</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dropdown listbox</th>
<th>Forms in QAF, OIF, GAF</th>
<th>Status: &lt;Status&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rows in item tables</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specific button, such as <strong>Release</strong></th>
<th>Toolbar of OWL tables</th>
<th>In Preparation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Toolbar of item tables</td>
<td>&lt;Status&gt;</td>
</tr>
<tr>
<td></td>
<td>Toolbar of QAF, OIF, GAF</td>
<td>&lt;Content&gt;</td>
</tr>
</tbody>
</table>

**Consistency Rules**
Take the following into consideration:

- Choose status values with an understandable meaning. Avoid to use, for example, a *Cancellation Status* with the values Yes and No. Choose in such a case values like *Cancelled* and *Not Cancelled*.
- Usually, label the main BO related status field or column just *Status*.
- For more specific or additional status label the field or column with a more specific name (see *Price Variance* in example "Edit An Invoice" below).
- Status values plus description: Each status value can have one or more additional textual descriptions. Label the additional textual description *Note* (see example "Edit An Invoice" below).
- Use texts for status values whenever possible. Only for very generic status variables use the icons of the official icon set.

**Examples for Status Values:**

<table>
<thead>
<tr>
<th>Object (Application)</th>
<th>Status Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import Status of Internal Supplier Catalogs (SRM)</td>
<td>Not Started, In Process, Successful, Failed</td>
</tr>
<tr>
<td>Purchase Plan (SRM)</td>
<td>New, Draft, In Approval, Approved, Released, Rejected, Used</td>
</tr>
<tr>
<td>Travel and Events</td>
<td>New, In Process, Completed</td>
</tr>
<tr>
<td>Approval Status Time Administration (HCM)</td>
<td>Not Released, In Approval, Approved, Rejected, Auto-approved, To be Changed, To be Deleted</td>
</tr>
<tr>
<td>Location (MOM)</td>
<td>In Preparation, Active, Blocked, Obsolete</td>
</tr>
<tr>
<td>Plans (Manager)</td>
<td>Not Started, In Process, Accepted, Rejected</td>
</tr>
<tr>
<td>SL Request (SCM)</td>
<td>In Preparation, Released, Started, Finished, Cancelled</td>
</tr>
<tr>
<td>SL TASK (SCM)</td>
<td>Not Started, In Process, Finished</td>
</tr>
</tbody>
</table>

**Example Status Value plus Description:**

The status *Price Variance* consists of values and their descriptions. Show the status values of *Price Variance* in a table column called *Price Variance*. Show the textual description of *Price Variance* in a table column called *Note*:

<table>
<thead>
<tr>
<th>Price Variance</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarified</td>
<td>Peter Greene accepted Price Variance</td>
</tr>
<tr>
<td>Clarified</td>
<td>Larry Fox changed manually Invoice Quantity</td>
</tr>
<tr>
<td>Forwarded</td>
<td>Exception forwarded to Peter Greene</td>
</tr>
</tbody>
</table>

**More Information**

Addresses
Avoid Redundancy between Group Titles and Field Labels
Date & Time
Field Labels
Form Pane
Object Identifier
Icons

Specific Topics > Icons

Page Content
When to Use Icons
Available Icons
Generic Icons: English and German Tooltips

When to Use Icons

In general, we recommend to use as few application specific icons as possible. Use plain text whenever possible. You can use icons to indicate a status and for the generic purposes described below.

Take the following into consideration:

- The sorting of table columns is based on the associated tooltip text, which may be contained in a column that is not visible.
- Status icons are allowed in the extended IDR because icons can significantly speed up the user's orientation towards critical information.
- Use either icons or texts as values for a status. Do not mix icons and text.
- All icons must come with a tooltip, see Tooltips.

Available Icons

Find all icons here: List of all Icons.

You can use the following icons for table headers (black and white versions) and for table columns (usually used in TOWLs, Notes and Attachments can also be used in OWLs). They come with the tooltip mentioned in the table:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Tooltip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escalation</td>
<td></td>
</tr>
<tr>
<td>Task Category</td>
<td></td>
</tr>
<tr>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>Attachments</td>
<td></td>
</tr>
</tbody>
</table>

Application icons need to come with an application specific tooltip. See the following table for the examples of application specific icons:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Example Tooltip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Released</td>
<td></td>
</tr>
<tr>
<td>Pending</td>
<td></td>
</tr>
<tr>
<td>In Escalation</td>
<td></td>
</tr>
<tr>
<td>In Preparation</td>
<td></td>
</tr>
</tbody>
</table>

English and German Tooltips for Generic Icons

The following table shows the most common generic icons used in patterns and their tooltips:

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Icon / Screen Element</th>
<th>English Tooltip</th>
<th>German Tooltip</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tool</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expand Tray [Icon]</td>
<td>Expand Tray</td>
<td>Bereich expandieren</td>
<td></td>
</tr>
<tr>
<td>Collapse Tray [Icon]</td>
<td>Collapse Tray</td>
<td>Bereich komprimieren</td>
<td></td>
</tr>
<tr>
<td>Graphic [Icon]</td>
<td>Switch to Chart</td>
<td>Zur Grafikansicht wechseln</td>
<td></td>
</tr>
<tr>
<td>Table [Icon]</td>
<td>Switch to Table</td>
<td>Zur Tabellenanzeige wechseln</td>
<td></td>
</tr>
</tbody>
</table>

**OWL**

<table>
<thead>
<tr>
<th>Toolbar</th>
<th>Filter [Icon]</th>
<th>Delete Filter and Close Filter Row</th>
<th>Filter entfernen und Filterzeile schließen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter Row</td>
<td>Filter [Icon]</td>
<td>Show Filter Row</td>
<td>Filterzeile anzeigen</td>
</tr>
<tr>
<td>AFFP More Options [Icon]</td>
<td>More Options</td>
<td>Weitere Optionen</td>
<td></td>
</tr>
<tr>
<td>Toolbar</td>
<td>Refresh [Icon]</td>
<td>Refresh</td>
<td>Aktualisieren</td>
</tr>
<tr>
<td>Column Header</td>
<td>Sorted Down [Icon]</td>
<td>Sorted in Descending Order</td>
<td>Absteigend sortiert</td>
</tr>
<tr>
<td>Column Header</td>
<td>Sorted Up [Icon]</td>
<td>Sorted in Ascending Order</td>
<td>Aufsteigend sortiert</td>
</tr>
<tr>
<td>Selection Row</td>
<td>Table Selection Menu [Icon]</td>
<td>Show Selection Menu</td>
<td>Auswahlmenü anzeigen</td>
</tr>
<tr>
<td>Drag Scroll-Slider [Element]</td>
<td>Row &lt;var 1&gt; to &lt;var 2&gt; of &lt;var 3&gt;</td>
<td>Zeile &lt;var 1&gt; bis &lt;var 2&gt; von &lt;var 3&gt;</td>
<td></td>
</tr>
</tbody>
</table>

**Settings Dialog**

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrow Right [Icon]</td>
<td>Add Column</td>
</tr>
<tr>
<td>Arrow Double Right [Icon]</td>
<td>Add All Columns</td>
</tr>
<tr>
<td>Arrow Left [Icon]</td>
<td>Remove Column</td>
</tr>
<tr>
<td>Arrow Double Left [Icon]</td>
<td>Remove All Columns</td>
</tr>
<tr>
<td>Arrow Right [Icon]</td>
<td>Move Up</td>
</tr>
<tr>
<td>Arrow Double Right [Icon]</td>
<td>Move to Top</td>
</tr>
<tr>
<td>Arrow Left [Icon]</td>
<td>Move Down</td>
</tr>
<tr>
<td>Arrow Double Left [Icon]</td>
<td>Move to Bottom</td>
</tr>
</tbody>
</table>

**Work Center**

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scroll Left [Icon]</td>
<td>Scroll Left</td>
</tr>
<tr>
<td>Scroll Right [Icon]</td>
<td>Scroll Right</td>
</tr>
<tr>
<td>Show All [Icon]</td>
<td>Show All</td>
</tr>
</tbody>
</table>

**Message Region**

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help [Icon]</td>
<td>Help</td>
</tr>
</tbody>
</table>

**Value Help**

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object Value Selector [Icon]</td>
<td>Open Value Selection</td>
</tr>
<tr>
<td>Select Options [Icon]</td>
<td>Options Selection</td>
</tr>
<tr>
<td>Calendar [Icon]</td>
<td>Calendar</td>
</tr>
<tr>
<td>Calculator [Icon]</td>
<td>Calculator</td>
</tr>
</tbody>
</table>

**More Information**

- Alignment of Values
- Tooltips
- Tooltips for Generic Functions
- Units of Measurement
Date & Time

Specific Topics > Date & Time

Page Content
Abbreviations Related to Date and Time
When to Use Date Only / Date, Time / Date, Time, Time Zone
Periods and Duration
Displaying Time Stamps
Displaying Elapsed Time
Displaying Administrative Data (Created On, Changed On)
Recurrence

Guidelines for UI Development
In FP3.5 time periods are separated via "/".
Example: From/To: __ / __

Abbreviations Related to Date and Time

The following table contains the abbreviations for terms related to date and time.

<table>
<thead>
<tr>
<th>Term</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month names</td>
<td>Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec</td>
</tr>
<tr>
<td>Day names</td>
<td>Mon, Tue, Wed, Thur, Fri, Sat, Sun</td>
</tr>
<tr>
<td>Year</td>
<td>yr</td>
</tr>
<tr>
<td>Month</td>
<td>mo</td>
</tr>
<tr>
<td>Week</td>
<td>wk</td>
</tr>
<tr>
<td>Day</td>
<td>d</td>
</tr>
<tr>
<td>Hour</td>
<td>h</td>
</tr>
<tr>
<td>Minute</td>
<td>min</td>
</tr>
<tr>
<td>Second</td>
<td>s</td>
</tr>
</tbody>
</table>

See also General Standards and Guidelines for Writing at SAP.

When to Use Date Only / Date, Time / Date, Time, Time Zone

Date Only

Show only the date when the exact time is not needed.
Label the field:

- In editing mode: `<Name> Date`, for example Delivery Date: 02/25/2009
- In display/read-only mode: `<Verb> On`, for example Delivered On: 02/25/2009

Examples:

Delivery Date: 12/20/2011

Delivered On
02/19/2010
03/14/2010
06/23/2010
**Date and Time**

Use a melting field for date and time in forms and tables. Label the field:

- In editing mode: `<Name> Date/Time`, for example **Delivery Date/Time: 02/25/2009 04:00 PM**
- In display/read-only mode: `<Verb> On`, for example **Delivered On: 02/25/2009 04:00 PM**

**Examples:**

![Due Date/Time: 12/20/2011 03:45 PM](image)

<table>
<thead>
<tr>
<th>Due Date/Time</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>02/19/2011 06:00 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>03/14/2011 03:00 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>03/01/2011 10:00 AM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Date, Time and Time Zone**

**Standard: Time zone is not displayed**

Display the time without time zone.

**Exception: Time zone is required**

Showing also the time zone may be required when the time relates to an object that is different from the current location's time zone.

If the use case requires the time zone, show the time zone code (such as `CET`) as static text (display-only mode). Do not show the description:

![Submission Deadline: 24.11.2011 12:30 CET](image)

In rare cases the time zone needs to be editable. In this case the timezone is always shown, unaffectedly by user’s local timezone. If so use the description (such as **Central European Time**) in the value help:

![Submission Deadline: 24.11.2011 12:30 CET](image)

### Example

The following examples show in which cases which information is displayed on the screen:

User A in Germany does not enter the time zone, user B in China sees the converted local time without timezone.

User A (Germany): Requested Date/Time: 24.11.2011 12:30 CET

User A in Germany enters the time zone, user B in China sees A’s time and timezone.

User A (Germany): Requested Date/Time: 24.11.2011 12:30 CET

User A and B are both in Germany. Although user A enters the time zone user B does not see it.

User A (Germany): Requested Date/Time: 24.11.2011 12:30 CET
User B (Germany): Requested On: 24.11.2011 12:30
Periods and Duration

Periods

Date Only Period:
In forms:
Use a melting field, label it `<Period> From/To`; for example: Expenses From/To.

| Period> From: | 12/01/2011 | Unlimited |
| Period> From: | 12/01/2011 | 12/02/2011 |

In tables:
Use two columns for start and end date.

<table>
<thead>
<tr>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/01/2011</td>
<td>12/09/2011</td>
</tr>
<tr>
<td>12/24/2011</td>
<td>12/31/2011</td>
</tr>
</tbody>
</table>

Date and Time Period:
In forms as well as in tables use two melting fields and label them Start Date/Time and End Date/Time.

<table>
<thead>
<tr>
<th>Start Date/Time</th>
<th>End Date/Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/14/2011 02:30 PM</td>
<td>12/22/2011 04:30 PM</td>
</tr>
</tbody>
</table>

Duration

The duration of time spans can be displayed in forms as well as in tables.
Duration fields should be labeled Duration. In forms the duration field should be placed below and in tables after the date/time fields.

<table>
<thead>
<tr>
<th>Start Date/Time</th>
<th>End Date/Time</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/14/2011 02:30 PM</td>
<td>12/22/2011 04:30 PM</td>
<td>8 Days 2 Hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Start Date</th>
<th>End Date</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/01/2011</td>
<td>12/09/2011</td>
<td>8 Days</td>
</tr>
<tr>
<td>12/24/2011</td>
<td>12/31/2011</td>
<td>7 Days</td>
</tr>
</tbody>
</table>

NOTE:
The duration is automatically calculated after the user enters the dates/times and presses ENTER.
Duration fields can also be editable in forms or tables. Depending on the internal definition of the respective duration field the user can enter a value which will be converted automatically.
Example:
The user enters days and hours and the duration field converts his as a valid duration value.
User entry:

3d 5h

The system converts:

3 Days 5 Hours

Undefined Start/End Date

The start and end date of a time period can be undefined or unlimited. In this case choose an empty field as value for the respective date.
The system will set the field to Unlimited after a roundtrip.

Example:
Displaying Time Stamps

Display time stamps with date and time.

**In Forms**
Display a label describing the purpose, followed by a colon and then display date and time in display-only format. Display the time zone when necessary. For more information see When to Use Date Only / Date, Time / Date, Time, Time Zone.

**Examples:**
- Updated On: 02/26/2009 04:45 PM
- Refreshed On: 12/31/2009 07:32 AM
  (Use the term Refreshed On if the user explicitly refreshes the screen.)

**In ICPs**
Use the term Data Refreshed Today At, then display the time without timezone, for example Data Refreshed Today At 09:48 AM

Displaying Elapsed Time

Use <N> <Unit> ago. Use Now when the elapsed time is less than one minute.

**Example:**

<table>
<thead>
<tr>
<th>Feed</th>
<th>Published</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;Feed&gt;</td>
<td>Now</td>
</tr>
<tr>
<td>&lt;Feed&gt;</td>
<td>12 minutes ago</td>
</tr>
<tr>
<td>&lt;Feed&gt;</td>
<td>2 hours ago</td>
</tr>
</tbody>
</table>

Displaying Administrative Data (Created On, Changed On)

Use the labels Created On and Changed On and display date and time in display-only format. Do not display the time zone.

For an example within a form see Administrative Data.
For an example within a table see Display: Names of Persons.

Recurrence

Use the following design:
<Recurrence>
- Daily
- Weekly
- Monthly
- Quarterly

Weekly Recurrence

Recurrence every: <Number> Week(s) On

- Monday: [ ]
- Tuesday: [ ]
- Wednesday: [ ]
- Thursday: [ ]
- Friday: [ ]
- Saturday: [ ]
- Sunday: [ ]

More Information

Forms & Fields
Functions & Menus

Specific Topics > Functions & Menus

Enabled (Active), Disabled, Hidden Buttons

Buttons can have the one of the following states:

- **Enabled (Active):** If the user can carry out the function in the current context.
- **Disabled:** If the user cannot carry out the function in the current context. The button is visible but deactivated.
- **Hidden:** If a function is never available for a user in the current context. The button is not visible.

If buttons are available in a certain context they can usually only be disabled. They should not be hidden to ensure positional consistency. This also applies to buttons on creation floorplans: In New mode the buttons which are only selectable after Save are disabled.

The following example shows buttons being disabled depending on the context:

![Example of Enabled, Disabled, Hidden Buttons]

Examples

Disabled Buttons

- **GAF - Confirmation Step**
  The Previous and Next buttons are disabled.

- **OWL**
  The Edit button is disabled when the table is empty. As soon as the table contains entries, Edit is active.

- **Read-only Floorplan**
  All buttons are disabled.

Hidden Buttons

- **Create -> Save -> Edit**
  In a creation floorplan buttons can be hidden although they appear in the editable floorplan. For example, when creating and saving a purchase order (PO) the Cancel Purchase Order button is hidden as it only makes sense to cancel a PO after you created the PO and sent it to the supplier.

- **Fact Sheet (display-only)**
  All buttons of the editable floorplan of the business object are hidden.

Finalizing Actions/Business Object (BO) Specific Functions

F-Actions (finalizing actions) and BO specific functions are functions that can be applied to a specific BO. They differ as follows:
• **F-Action**
  - Finishes creation or editing of a business object
  - Placed left in the toolbar. This allows the user to easily finish a task with one click on a button that is always in the same position.
  - Closes the screen, success message is displayed on the calling screen
  - Saves business object on database, usually triggers a follow-on process
  - In most use cases only one F-Action is needed. In approval uses cases, for example, you need more than one F-Action (Approve, Reject).

• **BO specific functions**
  - Can be carried out before finishing the creation or editing of a business object
  - Placed right in the toolbar
  - Do not close the screen
  - Do not necessarily save the business object

The following picture shows an example of a purchase order toolbar containing an F-Action and BO specific actions:

1. F-Action
2. BO specific functions
   - Place the most often used functions as separate buttons in the toolbar. If there are many or less often used BO specific functions available you can put them into the Actions menu button.

### Menu Buttons

Menu buttons should contain two entries at least. If only one entry is available:

- The entry needs to be removed.
- The button label does not change.
- The tooltip consists of the button label plus the menu entry.

Example: The Export button only offers the entry To Microsoft Excel. The menu is removed, the button is labeled Export and the tooltip Export to Microsoft Excel.

### New and Actions Buttons for BTM

**New Button**

You must include the New button in OWLs and TOWLs to offer at least the generic Business Task Management (BTM) functions in the following order:

- OWL: `<Application-Specific BO Type>` | Task, Notification, Alert | Clarification Request
- TOWL: Task, Notification, Alert | Clarification Request

For other floorplans: Include the New button also in OIFs, Fact Sheets and on the Confirmation step of a GAF offering at least Task, Notification, Alert | Clarification Request. Use it also in QAFs if an additional Save button is available besides the F-Action. Generic BTM functions can only be carried out for already created objects.

In rare use case the New button can be omitted.

**NOTE:** Do not repeat the word “new” for entries in the New button menu.

**Actions Button**

You must include the Actions button in TOWLs to offer the generic BTM functions in the following order:

- Change Priority
- Forward
- Acknowledge (for notifications)
- Complete (optional, depends on the design of the task type)
- Cancel (optional, depends on the design of the task type)
- Open Details
- Add Notes or Show Notes (Add Notes is used when no notes are available; Show Notes is used when notes are already available, the user can also add notes from the floorplan launched.)
- Add Attachments or Show Attachments (Add Attachments is used when no attachments are available; Show Attachments is used when attachments are already available, the user can also add attachments from the floorplan launched.)
**Button Placement in Forms**

Place buttons in forms next to the input field. Commonly used buttons in forms are New and Go:

- **New**: Used to create a new instance of the business object
- **Go**: Used to select one or more instances of a business object and prepopulate its data on the screen. For example, if you want to create an invoice with reference to a purchase order you need enter the purchase order ID and click Go. The invoice screen is prepopulated with the purchase order data.

**Button Placement in Toolbars of Floorplans (QAF, OIF, GAF, Fact Sheet, Modal Dialog)**

In floorplans, place the buttons in the order shown in picture 1 into the toolbars. Place additional buttons for output management, BO specific actions, etc. behind the buttons on the left side in picture 1 and use the order shown in picture 2. Picture 3 shows you the recommended order for the most commonly used BO actions.

Separators (|) segregate button groups.

**Rule of thumb for QAFs and OIFs:**

\[
\text{[F-Action]} \quad \text{[Save]} \quad \text{[Close]} \quad | \quad \text{[Preview]} \quad | \quad \text{[New]} \quad | \quad \text{[BO-Action]} \quad \text{[Actions]}^4
\]

**NOTE:** For the placement of buttons in patterns, see the respective pattern chapters.

**Picture 1: Finalizing Action, Save, Close, View All, Basic View**

The following picture shows the buttons of the first button group and - if available - the buttons on the right side of the toolbar. Place output management, New or BO specific buttons right next to the first button group. For their order see Picture 2: Output Management, New, BO Actions below.

- **QAF Create, Edit**
- **OIF Create**
- **OIF Edit**
- **Fact Sheet**
- **GAF 1-n and Review**
- **GAF Confirmation**
- **Modal Dialog Edit**
- **Modal Dialog Display**

- **Mandatory**
- **Not recommended but allowed**

**NOTES**

- For the behaviour of finalizing actions see F-Actions/Business Object (BO) Specific Functions and Saving Data in QAFs and OIFs
- If necessary you can use more than one \(<\text{F-Action}>\) button. Place the most often used \(<\text{F-Action}>\) left. If you need to display...
alternative functions, place the positive one first (for example, place Approve first, then Reject), see Saving Data in QAFs and OIFs.

Example QAF Create:

| Release | Release without Posting | Close |

- For master data objects such as Product or Supplier you can label the button Save and Close instead of <F-Action>, see Saving Data in QAFs and OIFs.

Example QAF Create:

| Order | Order and New | Close |

- If the use case requires to create another object within the same window you can place <F-Action and New> after <F-Action>.

Example QAF Create:

| Order | Order and New | Close |

- If you use <F-Action> and Save and Close, use the following order: 1-n <F-Action>, Save and Close, Close.

**Guided Activity (steps 1-n and Review)**
- Depending on the context the Previous, Next, and Finish buttons are disabled. For example, the Previous button is disabled on the first step, the Finish button is disabled until the step where all necessary data is entered. The Next button is disabled on the Review step.
- You can also label the Finish button <F-Action>, see Saving Data in GAFs.

**Modal Dialog (editable)**

- You can also label the <F-Action> button OK.
- If the application implemented a cancel function with automatic clearing of the buffer place the Cancel button after the <F-Action> button.
- Additional functions like Clear or Reset affecting the whole modal dialog may appear behind the <F-Action> or - if a Cancel button is available - behind the Cancel button.

Example: [OK] [Cancel] [Clear] [Reset]

**You Can Also**, see You Can Also (YCA) Menu

**View All vs Basic View**
- Use Basic View on OIFs if a QAF is available (navigates from OIF to QAF).
- Use View All on QAFs and Fact Sheets if an OIF is available (navigates from QAF to OIF).

**Save Draft**
- If you use Save Draft in QAFs and OIFs, place the button directly behind the Close button.
- If you use Save Draft in GAFs, place the button directly behind the Cancel button.

**Picture 2: Output Management, New, BO Actions**

The following picture shows the order of output functions, New button and BO actions:

| Print | Preview | New | 1-n | <BO Actions> | Actions |

**NOTES**
- Print triggers a page print and is mandatory for Fact Sheets.
- Preview triggers a form based print, see Preview, Print, Send, Print List, Export.
- New button:
  - OIFs, Fact Sheets: is mandatory for BTM
  - QAFs: is mandatory if an additional Save button is available
  - GAFs: is mandatory for BTM. Place the button only on the Confirmation step.
  - See New and Actions Buttons for BTM
- You can use 1-n <BO-Action> buttons
- On a display Modal Dialog you can not add any other buttons but only use Close.

**Picture 3: Order of Commonly Used BO Actions**

The following picture shows the recommended order of commonly used <BO Actions>:

| Copy | Follow-Up | Changes Status | Check |

**Toolbar Examples**

**Example QAF Create:**

| Order | Order and New | Close | Preview | New | You Can Also | View All |

**Example QAF Create:**
Example OIF:

Common Tasks (CT) Menu

To design the Common Tasks Menu use the following guidelines:

1. For common tasks triggering new BOs use New <BO Type>. Example: New Purchase Order

2. For other cases use generally <Verb> <BO Type>. Example: Change Stock

Consider the following cases:
- If the floorplan title is equivalent to the format <Verb> <BO Type> use the floorplan title for the common task.
- For common tasks triggering editable floorplans use the format Edit <BO Type>.
- For common tasks triggering display-only and read-only floorplans use View <BO>.
- For common tasks triggering a report use Run <Report Name>.

3. If the common task triggers MS Outlook use one of the following labels:
   - Open Calendar: Opens the Outlook calendar
   - New E-Mail: Opens a new empty mail
   - New Contact: Opens a new empty contact window
   - New Task: Opens a new empty task

4. Sort the entries in descending order of importance/frequency of use.
   All common tasks are visible. Group them as follows and sort them alphabetically within the groups:
   - New CTs
   - Action CTs
   - Report CTs
   - Outlook CTs

5. Choose only one Common Tasks menu per WoC. If this is not possible, design the Common Tasks similar for the sub-views.

For information about navigating in the Common Tasks Menu see Common Tasks.

Example

The following screenshot is taken from an FP3.5 ByD System:

**Common Tasks**
- New Product
- New Service
- New Entitlement
- New Product Specification
- New Product Catalog
- Exchange Rates for Foreign Currencies
- Upload Commodity Catalog
- Mass Reclassification
- New Corporate Account
- New Private Account
- New Contact

Context Menu

Context menus are strongly recommended in OWLs and TOWLs. Clicking the context menu icon opens the context menu.

- OWL: Place the context menu icon next to the BO ID the OWL is consisting of. For example, if the OWL contains purchase orders the you should offer a context menu for each purchase order in the column Purchase Order ID.
- TOWL: Place the context menu icon next to the task title.

Context menus should not only contain the actions of the toolbar. Use them for more specialized functions and functions that can only be applied to one OWL or TOWL entry. For multiple row actions use the toolbars BO actions area, see Business Object (BO) Specific Functions.

The number of items in a context menu should not exceed 15.
A context menu consists of up to three sections that are separated by separator lines. These sections contain:

- Basic generic functions and quick actions
- Status changes and BO specific functions
- BTM functions

The following functions can be placed into the context menu:

- **Basic Generic Functions**: Edit (or alternatively Edit All, Quick Edit), View
- **Quick Actions**: Approve, Reject, Delete, Remove
- **Status Changes**: Change Status
- **BO Specific Functions**: Start Travel Cancellation, Publish, Download, Simulate, Archive, Retrieve from Archive, Release, Terminate, Transfer, Hold, Manage Jobs, View Defaults
- **BTM Functions TOWL**: Forward, Change Priority, Complete, Cancel, Open Details, Add Notes or Show Notes, Add Attachments or Show Attachments

**You Can Also (YCA) Menu**

Put functions in the YCA menu that do not relate directly to the primary BO of the floorplan. Add in case of an editable OIF and QAF Open Overview to navigate to the Fact Sheet. Avoid redundancy: do not add functions that are already shown in the toolbar.

**NOTE:**
Open Overview does not appear in a Fact Sheet.

Put the entries into the following order. The generic actions are on bottom:

1. New <BO>, whereas the BO is of a different type than the BO dealt with
2. <BO Actions>, examples: Assign Logistics Unit, Edit Project, Edit Output Settings
3. Run <Report>, example: Run Cost Center Planning
4. <Outlook Functions>, examples: Open Calendar, Open Tasks
5. Open Overview, opens the Fact Sheet of the BO

**Example:**

- You Can Also
  - New <BO>
  - <BO Actions>
  - Run <Report>
  - <Outlook Functions>
  - Open Overview

**Generic Functions**

The following table lists the most common generic functions, their meaning and german translation:

<table>
<thead>
<tr>
<th>Function Name English</th>
<th>Description</th>
<th>Function Name German</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actions*</td>
<td>Contains secondary BO actions and BTM actions Forward and Change Priority</td>
<td>Aktionen*</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Add to Favorites</td>
<td>Adds a floorplan to the favorites</td>
<td>Zu Favoriten hinzufügen</td>
</tr>
<tr>
<td>Add Row</td>
<td>Adds a row at the end of the list</td>
<td>Zeile hinzufügen</td>
</tr>
<tr>
<td>Advanced</td>
<td>Switches from basic to advanced search</td>
<td>Erweitert</td>
</tr>
<tr>
<td>Apply</td>
<td>Used in dialog windows. Shows preview of changes but does not save.</td>
<td>Übernehmen</td>
</tr>
<tr>
<td>Approve</td>
<td>Used for approving BOs</td>
<td>Genehmigen</td>
</tr>
<tr>
<td>Basic</td>
<td>Switches from advanced to basic search</td>
<td>Einfach</td>
</tr>
<tr>
<td>Basic View</td>
<td>Used in OIFs. Launches an (editable) QAF inplace (not available if QAF does not exist).</td>
<td>Einfache Sicht</td>
</tr>
<tr>
<td>Cancel</td>
<td>Used in GAFs (all steps except the Confirmation step) and Modal Dialogs. Closes the window.</td>
<td>Abbrechen</td>
</tr>
<tr>
<td>Cancel &lt;BO&gt;</td>
<td>If Cancel is an application specific function, add the BO type. Example: Cancel Negotiation</td>
<td>depends on function</td>
</tr>
<tr>
<td>Check or Check Consistency</td>
<td>Checks whether a business object is consistent and does not contain any errors. Use Check whenever possible. Use Check Consistency when a corresponding field such as Consistency Status is on the screen so that the relation between the button and the field is clear to the user.</td>
<td>Prüfen oder Konsistenz prüfen</td>
</tr>
<tr>
<td>Change Status*</td>
<td>Changes the status of a BO, see Status</td>
<td>Status ändern</td>
</tr>
<tr>
<td>Close</td>
<td>Closes the window</td>
<td>Schließen</td>
</tr>
<tr>
<td>Close &lt;BO&gt;</td>
<td>If Close is an application specific function, add the BO type. Example: Close Lot</td>
<td>depends on function</td>
</tr>
<tr>
<td>Collaborate</td>
<td>Opens collaboration window</td>
<td>Zusammenarbeiten</td>
</tr>
<tr>
<td>Copy</td>
<td>Creates a new object of the same BO type in a new window</td>
<td>Kopieren</td>
</tr>
<tr>
<td>Create with Reference</td>
<td>Used in creation floorplans. Opens a modal dialog for selecting the BO to be referenced</td>
<td>Anlegen mit Bezug</td>
</tr>
<tr>
<td>Default</td>
<td>Used in ICPs. Sets view as standard.</td>
<td>Standard</td>
</tr>
</tbody>
</table>
| Delete | Deletes the BO after launching a confirmation dialog  
Success message for the deletion is shown in the WC |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>Used in ICPs. Opens analysis pattern in a new window.</td>
</tr>
<tr>
<td>Edit</td>
<td>Opens a floorplan of a selected object in edit mode. If both, QAF and OIF, should be launchable use a menu button Edit^ with the options Quick and All in the given order.</td>
</tr>
<tr>
<td>Edit Output Settings</td>
<td>Allows to change the output settings, for example from print to email</td>
</tr>
<tr>
<td>Export</td>
<td>Downloads data to Excel or Adobe</td>
</tr>
</tbody>
</table>
| <F-Action> | Finalizing Action, saves data to the database  
Eventually triggers a follow-on process  
Closes the window, success message is displayed on calling screen  
Can be labelled Submit, Order, Post, etc. |
| <F-Action> and New | Saves data and clears fields on the floorplan |
| Finish | Finalizing action in GAFs |
| Follow-Up | Creates a new object with reference  
Starts the appropriate floorplan in a new window  
The data of the referenced object is preset in the new floorplan |
| Go | Used in OWLs and TOWLs to start search |
| Graphic | Used in ICPs. Changes from list to graphics view. |
| Log Off | Logs off from ByD and closes all open windows |
| Log On | Logs on |
| Mass Change | Used for changing many BOs |
| More | Used in Fact Sheets and forms.  
Fact Sheets: Opens the tab of the corresponding OIF  
Forms: Opens a modal dialog with additional information |
<p>| New | Creates an object. If necessary you can also name the object, New &lt;BO&gt;. Example: New Invoice |
| Next | Moves one step forward; can be replaced with Submit or &lt;F-Action&gt; from the step on where all mandatory data is entered |</p>
<table>
<thead>
<tr>
<th><strong>Open</strong></th>
<th><strong>Opens an editable floorplan but the user's goal is to view information and not to change data</strong></th>
<th>Öffnen</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Open Overview</strong></td>
<td><strong>Used in You Can Also to open the factsheet</strong></td>
<td>Übersicht öffnen</td>
</tr>
<tr>
<td><strong>OK</strong></td>
<td><strong>Default action in modal dialogs</strong></td>
<td>OK</td>
</tr>
<tr>
<td><strong>Organize Queries</strong></td>
<td><strong>Used for organizing queries, such as renaming, deleting</strong></td>
<td>Abfragen organisieren</td>
</tr>
<tr>
<td><strong>Personalize</strong></td>
<td><strong>Opens personalization area</strong></td>
<td>Personalisieren</td>
</tr>
<tr>
<td><strong>Preview</strong></td>
<td><strong>Opens a PDF document based on a template to print or send the document</strong></td>
<td>Vorschau</td>
</tr>
<tr>
<td><strong>Previous</strong></td>
<td><strong>Moves one step back</strong></td>
<td>Zurück</td>
</tr>
<tr>
<td><strong>Print List</strong></td>
<td><strong>Prints the table (OWL) displayed on the screen via new window and a PDF</strong></td>
<td>Liste drucken</td>
</tr>
<tr>
<td><strong>Reject</strong></td>
<td><strong>Used for rejecting BOs</strong></td>
<td>Ablehnen</td>
</tr>
<tr>
<td><strong>Remove</strong></td>
<td><strong>Removes a BO or an item from a table but does not delete it from the database</strong></td>
<td>Entfernen</td>
</tr>
<tr>
<td><strong>Reset</strong></td>
<td><strong>Used in OVS to reset the search criteria</strong></td>
<td>Zurücksetzen</td>
</tr>
<tr>
<td><strong>Save</strong></td>
<td><strong>Window stays open</strong></td>
<td>Sichern</td>
</tr>
<tr>
<td></td>
<td><strong>Data is saved, no follow-on process is triggered</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Fields remain editable</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Save and Close</strong></td>
<td><strong>Saves data and closes the floorplan</strong></td>
<td>Sichern und schließen</td>
</tr>
<tr>
<td><strong>Save and New</strong></td>
<td><strong>Saves data and clears fields on the floorplan</strong></td>
<td>Sichern und neu</td>
</tr>
<tr>
<td><strong>Save Draft</strong></td>
<td><strong>Window stays open</strong></td>
<td>Entwurf sichern (may vary depending on application)</td>
</tr>
<tr>
<td></td>
<td><strong>Saves (incomplete) data without checking for completeness</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Fields remain editable</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>NOTE: Save Draft is currently not implemented.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Save Query</strong></td>
<td><strong>Saves user defined query</strong></td>
<td>Abfrage sichern</td>
</tr>
<tr>
<td><strong>Submit</strong></td>
<td><strong>General term for an &lt;F-Action&gt;. Use it only if no specific term is available.</strong></td>
<td>Abschicken (may vary depending on application)</td>
</tr>
<tr>
<td><strong>Table</strong></td>
<td><strong>Used in ICPs. Changes from graphics to table view.</strong></td>
<td>Tabelle</td>
</tr>
<tr>
<td><strong>Translate</strong></td>
<td><strong>Opens the floorplan for translating texts</strong></td>
<td>Übersetzen</td>
</tr>
</tbody>
</table>
View

- Opens a floorplan in read-only mode. If necessary you can also name the object, View <BO>. Example: View Invoice

View All

- Launches an OIF inplace (either editable or read-only). It is not available if no OIF exists.

NOTE:

- Do not use combinations of two functions like Submit and Print (exceptions are <F-Action> and Close and Save and Close).
- Maintain, use Edit instead.
- Show or Display, use View instead.
- Download, use Export instead.
- Functions like Check, Activate, Simulate, Change Status which cause actions in the backend should raise an information message.

Tooltips for Generic Functions

Note: Usually you do not need tooltips on buttons. It is not allowed to simply repeat the label of the button in the tooltip.

The following table lists the English and German tooltips for generic functions:

<table>
<thead>
<tr>
<th>Function</th>
<th>English Tooltip</th>
<th>German Tooltip</th>
<th>UI Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced</td>
<td>Advanced Search (Ctrl+G)</td>
<td>Erweiterte Suche (STRG+G)</td>
<td>Find Form (OWL, OVS)</td>
</tr>
<tr>
<td>Basic</td>
<td>Basic Search (Ctrl+G)</td>
<td>Einfache Suche (STRG+G)</td>
<td>Find Form (OWL, OVS)</td>
</tr>
<tr>
<td>Cancel</td>
<td>CTRL+Q</td>
<td>STRG+Q</td>
<td>GAF (all steps besides Confirmation step)</td>
</tr>
<tr>
<td>Close</td>
<td>CTRL+Q</td>
<td>STRG+Q</td>
<td>OIF, QAF, GAF (Confirmation step)</td>
</tr>
<tr>
<td>Finish</td>
<td>CTRL+S</td>
<td>STRG+S</td>
<td>GAF</td>
</tr>
<tr>
<td>Save</td>
<td>CTRL+S</td>
<td>STRG+S</td>
<td>OIF, QAF</td>
</tr>
<tr>
<td>View All</td>
<td>View All and Edit</td>
<td>Alles anzeigen und bearbeiten</td>
<td>Fact Sheet, QAF</td>
</tr>
</tbody>
</table>

More Information

Accelerator Keys and Hot Keys
Preview, Print List, Send and Export
Tooltips
Generic Icons: English and German Tooltips
Object Identifier

Specific Topics > Object Identifier

Page Content

Display Only ID or Only Description or Both?

Usage in Titles

Visualization of BOs in Melting Fields, Separate Fields, or One Field

Guidelines for UI Development

With FP3.5 the suggest feature does not show not up until entering two characters.

Display Only ID or Only Description or Both?

You are allowed to display only the ID or only the description if the business object is identified most of all by this. Display ID and
description together if both parts of the Object Identifier are useful or needed to identify the business object or if different user groups
(such as experts, novices) prefer either the one or the other.

**NOTE:** If you display ID and description, place ID before description.

Usage in Titles

If ID and description are concatenated, separate them with a whitespace in titles of the OWL details area and with a dash "-" in floorplan
titles. Use a blank before and after the dash.

**Titles within details area:**

- Task: Complete Purchase Order 234566
- Details: Sales Order 49821

**Floorplan titles:**

- Lead Overview: 232543
- Service Agent: 345435 - Peter Bond

Do not use the terms **ID** and **Description** in titles.

Visualization of BOs in Melting Fields, Separate Fields, or One Field

In editable or read-only mode use **one field only** naming the business object to display ID and description. You are allowed to
display either the ID and the description, or only the description of the business object without ID (recommended) within the field. The
field content is displayed as a tokenizer which means that it is underlined and the respective Fact Sheet can be accessed by a double
click.

Use the tokenizer also in editable tables. Do **not** use the tokenizer for read-only or display-only tables or within the Advanced Find Form.

Field Label

Do not use the terms **ID** and **Description** for tokenizer field labels and melting field labels. Use `<BO Type>`, such as **Product** or **Supplier**:

Editing: IDs and Names in Dropdown Listboxes and Tokenizer

Do not show the backend ID (or technical ID) of names in dropdown listboxes. If necessary, show the employee ID. Order the names in
the listbox as follows: `<Last Name>`, `<First Name>`. Use the same order for the tokenizer. You can optionally show the employee ID, if so,
the order is `<Employee ID>`, `<Last Name>`, `<First Name>`.

Example: After entering "mi" in the entry field, the dropdown listbox shows the following entries:

- *Miller, Peter*
- *Miller, Robert*
- *Milly, Anna*
- *Peters, Miranda*
After selecting Miranda Peters, the tokenizer is `Peters, Miranda`.

For displaying ID and names see Names of Persons and Technical User IDs.

**Example: Editing ID and Description**

The user enters "br":

![Dropdown listbox](image)

The dropdown listbox opens and displays all objects containing "br". This function is called suggest feature and is not case-sensitive.

![Dropdown listbox](image)

The user selects an object. Object and description are displayed as tokenizer:

![Dropdown listbox](image)

**Displaying ID and Description in Melting Fields**

If ID and description are concatenated in display-only forms or IDR's, separate them with one dash " - ". The dash is preceded and followed by a blank. Place one link on ID and description:

![Dropdown listbox](image)

**Example:**

![Dropdown listbox](image)

**Exceptions**

- If the suggest feature can not be used in a Find Form Pane you can use two separate fields for ID and description. Arrange the ID above the description.
- In OWLs offer ID and description as separate columns to allow sorting for both values. It is recommended to offer a melting field with ID and description in the hidden fields.

**More Information**

Field Labels
Identification Region
Names of Persons and Technical Users
Positive and Negative Values

Specific Topics > Positive and Negative Values

Displaying Positive & Negative Totals for Business Objects

For different types of business objects that are displayed in one list, usually an OWL, follow these rules:

- Display a column telling the user the type of the business object such as invoice, cancellation, credit memo.
- Display the total value using the same sign per type. Positive signs are not displayed in the UI, negative signs are visualized with "-". Use the sign of the according total value in the transaction which is usually positive.

The following example shows an excerpt of an OWL containing invoices and credit memos:

<table>
<thead>
<tr>
<th>&lt;...&gt;</th>
<th>&lt;...&gt;</th>
<th>Invoice Type</th>
<th>&lt;...&gt;</th>
<th>Net Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Invoice</td>
<td></td>
<td>10,000.00 USD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Invoice</td>
<td></td>
<td>500.00 USD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Credit Memo</td>
<td></td>
<td>-2,000.00 USD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Invoice</td>
<td></td>
<td>1,500.00 USD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Credit Memo</td>
<td></td>
<td>-5,000.00 USD</td>
</tr>
</tbody>
</table>

Displaying Positive & Negative Values for Business Object Items

If a business object contains items of different types, such as an invoice may contain credit memo items and invoice items, follow these rules:

- Display values of the same item type with the same sign (for example, show credit memo items always as negative values and invoice items always as positive values).
- To figure out which sign should be assigned to an item type:
  - Understand the meaning of the business object first.
  - Decide which item types add to the total value of the business object (positive value).
  - Decide which item types subtract from the total value of the business object (negative value).
- If necessary show an extra column with the item type.

NOTE: Changing the overall document type from Posted to Canceled does not change the sign of items.

Example: Items in a Business Object

In an invoice, credit memo items subtract from the total value, therefore they get a negative number. Invoice items add to the total value, therefore they get a positive number.

<table>
<thead>
<tr>
<th>Number</th>
<th>Product ID</th>
<th>Product Description</th>
<th>Purchase Order ID</th>
<th>Punch Order Item</th>
<th>Tax Code</th>
<th>Invoice Quantity</th>
<th>Invoice Price</th>
<th>Price per</th>
<th>Net Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt;Description&gt;</td>
<td>&lt;ID&gt;</td>
<td>&lt;Tax Code&gt;</td>
<td>▼ 1 ea ▼</td>
<td>100.00 EUR</td>
<td>ee</td>
<td>100.00 EUR</td>
<td>ea</td>
<td>100.00 EUR</td>
</tr>
<tr>
<td>3</td>
<td>&lt;Description&gt;</td>
<td>&lt;ID&gt;</td>
<td>&lt;Tax Code&gt;</td>
<td>▼ 1 ea ▼</td>
<td>100.00 EUR</td>
<td>ea</td>
<td>-100.00 EUR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Example: Items in a Document Flow

In the document flow of a purchase order item the goods receipt items get a positive value and the goods receipt cancellation items get a negative value.

Example: Purchase Order Item
### More Information

**Display and Editable Modes**

**Forms & Fields**

<table>
<thead>
<tr>
<th>Document Type</th>
<th>Document ID</th>
<th>Quantity</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing Contract</td>
<td>&lt;ID&gt;</td>
<td>10 ea</td>
<td>100.00 USD</td>
</tr>
<tr>
<td>Goods And Service Confirmation</td>
<td>&lt;ID&gt;</td>
<td>6 ea</td>
<td>50.00 USD</td>
</tr>
<tr>
<td>Goods And Service Cancellation</td>
<td>&lt;ID&gt;</td>
<td>-6 ea</td>
<td>-50.00 USD</td>
</tr>
</tbody>
</table>
Primary Help

Specific Topics > On-Screen Help

Page Content

Definition: Primary Help

Primary Help are texts that do not show up in the Help Center but directly on screen areas, fields, buttons, etc. Primary Help is either permanently displayed such as on-screen explanations or displayed on user request such as rollover explanations and tooltips.

On-Screen Explanations

On-screen explanations explain the purpose and impact of a particular screen or part of a screen. They are displayed by default but the user can switch them off via personalization, see My Settings in Additional Personalization Features.

Rollover Explanations

Rollover explanations, also called mouseovers, explain the purpose and impact of a field, a function, a tab, or a table column header. Field labels, buttons, tabs and table column headers with a rollover explanation have an underline. When the user points the mouse cursor on the field label or button, the text is displayed. The underlines are shown by default but the user can switch them off via personalization, see My Settings in Additional Personalization Features.

Note: No other controls than the above mentioned must have rollover explanations.

Tooltips

Tooltips display the name of a screen element when the user points the mouse cursor on the element.

When to Add a Tooltip

A tooltip is required when the screen element has one of the following characteristics:

- Can be (partially) hidden from the user's view. This is for example the case for table screen elements such as column header labels and table cells which can be resized.
NOTE: If necessary you can add tooltips to screen elements such as buttons or hyperlinks that do not have the characteristics mentioned above. The reason is that the tooltip describes the function more precisely.

Do only show tooltips for screen elements that have one of the above characteristics. Do not show tooltips that simply repeat the text of the screen element.

**Wording of Tooltips**

Follow these guidelines:

- For **screen elements** that can be (partially) hidden: Use the same wording for the screen element and for the tooltip.
- For **abbreviations**: Write out the abbreviation. Do not add any additional text into the tooltip.

**NOTE** (for display-only and read-only fields and table columns):
- For melting fields containing an abbreviated unit of measurement (UoM) or a currency such as EA or USD proceed as follows: Write out the value and the abbreviation in the tooltip, see example below.
- For abbreviated field labels in connection with a melting field content whereas the content contains an abbreviated UoM or currency, proceed as follows: Write out the label and the content in one tooltip. Separate label and content with “:”, see example below.
- For screen elements accessible via **hot key**: Do only write the hot key into the tooltip. Example: The Save button shows the tooltip `CTRL+S`. For further information see Accelerator Keys and Hot Keys.
- For **icons**:
  - Use a name that precisely indicates the purpose.
  - Use the same tooltip for an icon throughout the system. If the function of a screen element differs significantly in the context of a particular screen or application, create a variant of the standard tooltip.
- For further information see **icons**.
- For a list of all icons and their standard tooltips see also Application Icons.
- For **images**: When adding an image the user needs to enter a title. The title is shown in the tooltip. Therefore no guidelines are available.
- **General**:
  - Use title case.
  - Use noun or verb forms or a combination of both such as *Calendar, Print Preview, Browse, Insert Hyperlink, and Display Filter Row*.
  - For verb-based forms use the imperative or the format `<Verb + Object>`. Do not use articles *(a, an, the)* when using the `<Verb + Object>` format.

**Examples**

The following table shows examplary tooltips:

<table>
<thead>
<tr>
<th>Screen Element</th>
<th>Tooltips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partially Hidden</td>
<td>ATP Product ID</td>
</tr>
<tr>
<td></td>
<td>MCF-0001-DM21</td>
</tr>
<tr>
<td></td>
<td>MCF-0001-DM21 - AHT CM81 75</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>ATP Product ID</td>
</tr>
<tr>
<td></td>
<td>MCF-0001-DM21</td>
</tr>
<tr>
<td>Display-Only / Read-Only: Abbreviation Melting Field</td>
<td>Price: 100 USD</td>
</tr>
<tr>
<td></td>
<td>100 United States Dollar</td>
</tr>
<tr>
<td>Display-Only / Read-Only: Abbreviation Label and Content</td>
<td>LU Quantity: 4 EA</td>
</tr>
<tr>
<td></td>
<td>Logistics Unit Quantity: 4 Each</td>
</tr>
</tbody>
</table>
### Icons

<table>
<thead>
<tr>
<th>ATP</th>
<th>Product ID</th>
<th>BOM Variant ID</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="MCF-00001-DM21.png" alt="Icon" /></td>
<td>MCF-00001-DM21</td>
<td>42</td>
<td><img src="ea.png" alt="Icon" /></td>
</tr>
</tbody>
</table>

**More Information**

- Generic Icons: English and German Tooltips
- Help, Sticky Notes, Tags, Shelf
- Icons
- System Messages
- S&G for Application Platform and Business ByDesign Documentation
- Tooltips for Generic Functions
- Value Help
System Messages

Specific Topics > Messages

Page Content
Definition: System Message
Specification and Test
Guidelines for Writing System Messages
Example

Definition: System Message

System messages provide system feedback, such as success, information, warnings, and errors. An icon indicates the type of the message:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Message Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔️</td>
<td>Success</td>
</tr>
<tr>
<td>📘</td>
<td>Information</td>
</tr>
<tr>
<td>🚨</td>
<td>Warning</td>
</tr>
<tr>
<td>☢️</td>
<td>Error</td>
</tr>
</tbody>
</table>

System messages provide concrete instructions, telling the user how to solve an issue in a certain context. They are displayed in the message region at the bottom of a screen - the message area has a maximum height of 5 lines (approximately 95 pixels). In case of error messages, the message is additionally displayed next to the entry field that the user needs to work on. The entry field is framed in red color.

The text of a system message displayed on the UI can either come from an Application Platform or ByD T100 message short text or from a UI text used as a system message.

T100 message texts can contain up to 73 characters.

If a T100 message short text is not suitable for the UI, for example, because the end user needs more information or concrete instructions on how to solve an error on the UI, or because the Application Platform terminology differs from the terms used on the UI, a UI text used as a system message can be assigned. The UI text is then displayed on the UI instead of the T100 message. UI texts used as system messages can contain up to 200 characters (additionally, a buffer of 50 characters is available for translation).

If the error situation is very complex, the user can access additional information via the More link in the message region. The additional information is displayed in a new window.

Messages are displayed in the message region at the bottom of a screen:

1. System message with text based on UI text used as system message (maximum of 200 characters)
2. "More" link launches a document in a new window
3. System message with text based on T100 message short text (maximum of 73 characters)
4. Message with success text

Specification and Test

NOTE: Messages are written by development and reviewed by Knowledge Management (KM).
UIDs need to take into consideration the following issues:

- Specification phase: Propose message texts, mainly for already known error situations. KM needs to review the message text, after that you can put it into the UI specification.
- Test phase: Check if messages are understandable and user friendly, and comply with guidelines (see below). If not, contact your responsible information developer. Ensure that field labels in the message text are the same as used in the UI.

Guidelines for Writing System Messages

You can find the S&G for SAP Business ByDesign System Messages on the following page: S&G for Business ByDesign Documentation.

Example

The following message is taken from an FP3.0 ByD System:

☑ Corporate account 600002 saved successfully

More Information

Confirmation Dialog
Help, Sticky Notes, Tags, Shelf
Icons
Tables

Specific Topics > Tables

Page Content
Cell Shading
Display and Editable Modes
Alignment of Content and Column Headers
Wrapped or Truncated Text
Melting Fields
Displaying Totals
Number of Columns in OWLs and TOWLs
Number of Rows
Order of Columns
Width of Columns
Label and Numbering of Table Lines

Cell Shading

It is possible to define different (standard) cell background colors and you can highlight values. The following table shows the available colors.

<table>
<thead>
<tr>
<th>Color</th>
<th>Color Hex</th>
<th>Color RGB</th>
<th>UR Enumeration:</th>
<th>Semantic Value Description</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBA33F</td>
<td>251,165,63</td>
<td>TOTAL</td>
<td>SapTableCellDesign</td>
<td>Totals</td>
<td>3 px high at bottom line; can be used with semantic background colors such as critical. Totals must be in bold font.</td>
</tr>
<tr>
<td>WHITE</td>
<td>White</td>
<td>255,255,255</td>
<td>STANDARD</td>
<td>Standard color</td>
<td></td>
</tr>
<tr>
<td>F3732F</td>
<td>244,116,47</td>
<td>NEGATIVE</td>
<td>3-step traffic light semantic</td>
<td>Data rating</td>
<td></td>
</tr>
<tr>
<td>2F8E00</td>
<td>255,216,0</td>
<td>CRITICAL</td>
<td>3-step traffic light semantic</td>
<td>Data rating</td>
<td></td>
</tr>
<tr>
<td>D6FF68</td>
<td>214,255,154</td>
<td>POSITIVE</td>
<td>3-step traffic light semantic</td>
<td>Data rating</td>
<td></td>
</tr>
<tr>
<td>F4732F</td>
<td>244,116,47</td>
<td>BADVALUE_DARK</td>
<td>Negative threshold values</td>
<td>Data rating</td>
<td></td>
</tr>
<tr>
<td>FF8567</td>
<td>255,123,103</td>
<td>BADVALUE_MEDIUM</td>
<td>Negative threshold values medium degree</td>
<td>Data rating</td>
<td></td>
</tr>
<tr>
<td>FEB913</td>
<td>254,185,19</td>
<td>BADVALUE_LIGHT</td>
<td>Negative threshold values low degree</td>
<td>Data rating</td>
<td></td>
</tr>
<tr>
<td>FFF543</td>
<td>255,248,67</td>
<td>CRITICALVALUE_DARK</td>
<td>Critical value high degree</td>
<td>Data rating</td>
<td></td>
</tr>
<tr>
<td>FFDE00</td>
<td>255,216,0</td>
<td>CRITICALVALUE_MEDIUM</td>
<td>Critical value medium degree</td>
<td>Data rating</td>
<td></td>
</tr>
<tr>
<td>FF25C</td>
<td>255,226,92</td>
<td>CRITICALVALUE_LIGHT</td>
<td>Critical value low degree</td>
<td>Data rating</td>
<td></td>
</tr>
<tr>
<td>B7DF89</td>
<td>183,233,104</td>
<td>GOODVALUE_DARK</td>
<td>Positive threshold value</td>
<td>Data rating</td>
<td></td>
</tr>
<tr>
<td>BAF16D</td>
<td>186,241,109</td>
<td>GOODVALUE_MEDIUM</td>
<td>Positive threshold value medium degree</td>
<td>Data rating</td>
<td></td>
</tr>
<tr>
<td>D1FF68</td>
<td>214,255,154</td>
<td>GOODVALUE_LIGHT</td>
<td>Positive threshold value low degree</td>
<td>Data rating</td>
<td></td>
</tr>
<tr>
<td>A5E5F4</td>
<td>166,229,244</td>
<td>KEY_MEDIUM</td>
<td>Marker 1 in date navigator</td>
<td>Data rating; important value</td>
<td></td>
</tr>
<tr>
<td>A0C3EA</td>
<td>162,195,234</td>
<td>GROUP_LEVEL1</td>
<td>Top level of hierarchical table</td>
<td>Customizable</td>
<td></td>
</tr>
<tr>
<td>BDCFE9</td>
<td>186,207,233</td>
<td>GROUP_LEVEL2</td>
<td>Group color 2 also for hierarchical table level 2</td>
<td>Customizable; use this color as level 1 if you only have two levels</td>
<td></td>
</tr>
<tr>
<td>D4DF89</td>
<td>212,223,239</td>
<td>GROUP_LEVEL3</td>
<td>Group color 3 also for hierarchical table level 3</td>
<td>Customizable</td>
<td></td>
</tr>
</tbody>
</table>

Totals must be displayed in bold font.

Example
The following screenshot is taken from an FP3.0 ByD system:
Negative, critical, and positive values can appear together in the same table. There is a 3-step traffic light semantic consisting of Positive, Critical, Negative. The elements of this group are bolded entries in the semantic Value Description column.

<table>
<thead>
<tr>
<th>Color</th>
<th>3-Step Semantic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NEGATIVE</td>
</tr>
<tr>
<td></td>
<td>CRITICAL</td>
</tr>
<tr>
<td></td>
<td>POSITIVE</td>
</tr>
</tbody>
</table>

Values of this 3-step traffic light must not be combined with the 9-step traffic light of GOODVALUE; BADVALUE; CRITICALVALUE having the three values DARK, MEDIUM and LIGHT. They are listed in the UR Enumeration: SapTableCellDesign column.

<table>
<thead>
<tr>
<th>Color</th>
<th>UR Enumeration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BADVALUE_DARK</td>
</tr>
<tr>
<td></td>
<td>BADVALUE_MEDIUM</td>
</tr>
<tr>
<td></td>
<td>BADVALUE_LIGHT</td>
</tr>
<tr>
<td></td>
<td>CRITICALVALUE_DARK</td>
</tr>
<tr>
<td></td>
<td>CRITICALVALUE_MEDIUM</td>
</tr>
<tr>
<td></td>
<td>CRITICALVALUE_LIGHT</td>
</tr>
<tr>
<td></td>
<td>GOODVALUE_DARK</td>
</tr>
<tr>
<td></td>
<td>GOODVALUE_MEDIUM</td>
</tr>
<tr>
<td></td>
<td>GOODVALUE_LIGHT</td>
</tr>
<tr>
<td></td>
<td>GROUP_LEVEL3</td>
</tr>
</tbody>
</table>

**NOTE:** The colors are highlighting a semantic. The specific color may change in the future but the semantic behind it remains.

**Example**
The color used for a specific semantic such as CRITICAL must not be used for totals.

**Display and Editable Modes**

**Display-Only Mode**
In a display-only table rows and cells can not be selected. It is possible to sort and scroll. You can use a toolbar, a Show dropdown list, and the basic/advanced search.

### Editable and Read-Only Mode

Tables in editable and read-only mode allow row and cell selection, sorting, and possibly vertical as well as horizontal scrolling. The data can be editable, read-only, or a combination of both. In case of a combination of read-only and editable fields, read-only fields get a blue background.

### Alignment of Content and Column Headers

Align table content as follows:

<table>
<thead>
<tr>
<th>Left Aligned</th>
<th>Center Aligned</th>
<th>Right Aligned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text</td>
<td>Icons</td>
<td>Amounts</td>
</tr>
<tr>
<td>Number (such as phone numbers, digits and other</td>
<td>(such as attachment icons)</td>
<td>Decimal Numbers (such as 302.00 USD)</td>
</tr>
<tr>
<td>integers that do not take part in calculations)</td>
<td>(category header of tables meaning</td>
<td></td>
</tr>
<tr>
<td>Date (such as 16/06/2011)</td>
<td>second row header)</td>
<td></td>
</tr>
<tr>
<td>IDs (such as 55678)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abbreviations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Links</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Units, Currencies</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Align table headers in the same way as the content. For example, align headers for text content left and headers for number content right.

For an example see Fields: Alignment of Values

### Wrapped or Truncated Text

Set column headers to wrap (default). This causes that the content wraps when the text length exceeds the column width. If a word is longer than the column width it is truncated, see Respons... in the picture below.

Set content cells to truncated (default). This causes that the content is truncated when the text length exceeds the column width.

The tooltip displays the complete text in any case. Truncated text is often readable enough while wrapped text costs much vertical space.
### Exception Content Cells:

Set text to wrap if:

- It is vitally important to the user to see the entire text at once
- The user may come to the wrong conclusion unless they see the entire text
- Example: The user sees Mechanical f... on the UI which can be Mechanical failure or Mechanical fine
- It makes no sense to truncate, like a long notes field with a lot of text

### Melting Fields

Melt two fields in a single column when they belong semantically together. Use melting fields always if possible.

Exception: Do not use them in tables when sorting for both fields is needed.

Example:

- Melt amount and unit (currency) in a single column, such as 59.95 USD.
- Name headers for such melting fields with a common and meaningful title from the two fields being merged, such as Net Value.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Net Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>59.95 USD</td>
</tr>
</tbody>
</table>

For information about the usage of single values see [Units of Measurement](#).

### Displaying Totals

Totals and sub totals are normally shown as part of the table. The total or sub total line displays the totals of the same unit. Totals or sub totals of a different unit are shown in an other total line.

<table>
<thead>
<tr>
<th>Invoice ID</th>
<th>Net Value</th>
<th>Currency</th>
</tr>
</thead>
<tbody>
<tr>
<td>20030012</td>
<td>120.00</td>
<td>EUR</td>
</tr>
<tr>
<td>20034523</td>
<td>80.00</td>
<td>EUR</td>
</tr>
<tr>
<td>25035718</td>
<td>225.50</td>
<td>USD</td>
</tr>
<tr>
<td>25034549</td>
<td>124.50</td>
<td>USD</td>
</tr>
<tr>
<td>20035711</td>
<td>134.86</td>
<td>EUR</td>
</tr>
<tr>
<td>20036009</td>
<td>65.14</td>
<td>EUR</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>400.00</strong></td>
<td><strong>EUR</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>350.00</strong></td>
<td><strong>USD</strong></td>
</tr>
</tbody>
</table>

Totals for fields not shown in the table can be placed in a separate block below the table. This is also valid for total fields which must always be visible. Place the values for different fields above each other. Align the block of fields to the right.
NOTE: Currently, a proper alignment of labels in this block with table columns can not be achieved.

**Number of Columns in OWLs and TOWLs**

Do not show more than 7 columns in an Object Worklist and 11 columns for a Task-Based Object Worklist to avoid a horizontal scrollbar. Display the status information in the first columns. You can offer additional columns as hidden fields. The user can put these columns on the UI using personalization.

**Number of Rows**

The number of rows to be shown is depending on the floorplan:

- **OIF/QAF/GAF Floorplan**
  Use exactly 5, 10 or 15 visible rows for one List Pane on the screen.
  For two List Panes on the screen use exactly 5/5, 5/10 or 10/5 visible rows.
- **OWL without Preview**
  Use exactly 5, 10 or 20 visible rows.
- **OWL with Preview**
  Use exactly 5 or 10 visible rows. If the preview contains a List Pane, use 5/10, 10/5 or 10/10 visible rows.
- **Fact Sheet and display-only tables**
  Display only as many rows as are filled with data (maximum 50).

In case of small tables, that means tables using half width, the minimal number of visible rows has to be at least 3. In case of read-only tables without any content the system shows one row containing the text *No records found.*

**Order of Columns**

Display the status/priority information in the first column(s) of a table or OWL.

Place the object ID and description columns (Object Identifier) of the primary BO after the column(s) with the status information. Order the subsequent columns according to their importance. If you show administrative data such as Created On, Created By, etc. use the order described in *Forms: Administrative Data.*

For more information on how to display the object identifier in tables see *Visualization of BOs in Melting Fields, Separate Fields, or One Field.* For more information on status see *Status.* For icons that can be used to indicate a status see *Icons.*

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
<th>Account</th>
<th>Expected Value</th>
<th>Employee Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Icon]</td>
<td>&lt;Description&gt;</td>
<td>Silverstar Wholesale Inc</td>
<td>13,603.12 USD</td>
<td>Kate Jacob</td>
</tr>
<tr>
<td>![Icon]</td>
<td>&lt;Description&gt;</td>
<td>Chauffages s.a.r.l</td>
<td>26,900.30 EUR</td>
<td>Wayne Short</td>
</tr>
<tr>
<td>![Icon]</td>
<td>&lt;Description&gt;</td>
<td>Kieler Yachtbau GmbH</td>
<td>230,000.00 EUR</td>
<td>John Mehli</td>
</tr>
<tr>
<td>![Icon]</td>
<td>&lt;Description&gt;</td>
<td>Northern Heating a/s</td>
<td>554,500.00 NOK</td>
<td>Jan Gabeirek</td>
</tr>
</tbody>
</table>

For the order of columns in TOWLs see *Consistency Rules: TOWL Content.*

**Width of Columns**
Usually you do not need to take care about the width of columns because the width is automatically rendered relating to the type of the field. For fields with an exact width such as date, time and icons the exact default width is rendered. All other fields have a relative width in %.

In rare cases it is required to overwrite the default. Example: The default length for an identifier is 100%. If an application decides to introduce identifiers that are longer the default can be changed.

The following picture shows examples for the width of columns:

<table>
<thead>
<tr>
<th>Priority</th>
<th>Status</th>
<th>Subject</th>
<th>Sent On</th>
<th>From</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;Prior...&gt;</td>
<td>&lt;Stat...&gt;</td>
<td>&lt;Task Subject&gt;</td>
<td>&lt;Date&gt;</td>
<td>&lt;Content&gt;</td>
</tr>
<tr>
<td>&lt;Prior...&gt;</td>
<td>&lt;Stat...&gt;</td>
<td>&lt;Task Subject&gt;</td>
<td>&lt;Date&gt;</td>
<td>&lt;Content&gt;</td>
</tr>
</tbody>
</table>

**Label and Numbering of Table Lines**

Use the following term and numbering (for flat tables that do not offer an insert row function):

1. Label the column header Line. If Line conflicts with any business object term also containing "line", use Line Item.
2. Number lines: 1, 2, 3, n

**NOTE:** If insert row is possible number as follows: 10, 20, 30, n
Value Help

Specific Topics > Value Help

Page Content
Single Value Selector (SVS)
Units of Measurement (UoM)
Object Value Selector (OVS)
Select Options
Date Picker
Calculator
Read-Only and Disabled Fields

Single Value Selector (SVS)

In a Single Value Selector input values are displayed within a dropdown listbox:

<table>
<thead>
<tr>
<th>Code</th>
<th>When To Use in Dropdown Listboxes</th>
<th>Edit / Read-Only Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Only Description</strong></td>
<td>In general, we recommend to display the description alone. This rule holds for all properties where the code is arbitrary such as numbers. This rule applies most often for status settings such as &quot;In progress&quot;.</td>
<td>Status:</td>
</tr>
<tr>
<td>Code plus Description</td>
<td>Sometimes you can display code plus description. This happens when the code part is somehow &quot;speaking&quot; to the user such as &quot;FOB&quot; but not generally known. The description &quot;Free on board&quot; helps to decipher the code.</td>
<td>Incoterm:</td>
</tr>
</tbody>
</table>

NOTE: For units of measurement the symbol instead of the unit code is displayed, see Units of Measurement (UoM) below.

The following table shows when to use only code or description and when to use both:

- Code / Description: This column lists the various codes used in the dropdown listbox.
- When To Use in Dropdown Listboxes: This column explains when to use only code, description, or both.
- Edit / Read-Only Example: This column provides examples of how the code and description are used in the dropdown listbox.
Only Code | Display the code only
--- | ---
• Within the entry field of the SVS for UoM (m, carton), currencies (EUR), and time (wk). The dropdown listbox displays both, code (or symbol) and description.
• In the second field of a melting group for UoM, currencies, and time.

<table>
<thead>
<tr>
<th>Currency: CHF ▼</th>
</tr>
</thead>
</table>
| AUD – Australian Dollar
| CHF – Swiss Francs
| EUR – Euro
| NOK – Norwegian Crowns

Purchase Order Amount: 2,450.60 CHF ▼
AUD – Australian Dollar
CHF – Swiss Francs
EUR – Euro
NOK – Norwegian Crowns

**How to separate Code and Description?**
Use a hyphen (“-”) to separate code and description. The hyphen is preceeded and followed with a blank.

**How to show “No selection”?**
If the user does not need to select an entry, show a blank entry.
If the use case requires a text instead of the blank entry, use a text like All, None, Unlimited. Do not use special characters like *, -, +.

**Sorting**
Define the appropriate sort order for the entries in dropdown listboxes. The following sort orders are available:

- **Standard (Default):** If either code alone or code plus description is displayed the entries are sorted by code. If only the description is displayed the entries are sorted by description.
- **Unsorted:** Only use “Unsorted” if the sorting provided by the backend is correct.
- **Ascending Code:** The entries are sorted by code.
- **Ascending Description:** The entries are sorted by description.

**Units of Measurement**
The Units of Measurement (UoM) unit code is automatically replaced by a symbol (see table below). The unit code is never displayed. Example: In case of hours the symbol h is displayed instead of the unit code HUR. Usually UoM appear together with an amount field.

**NOTE:** Currently descriptions cannot be translated. They show up in English only.

See the common UoM with their unit codes, descriptions, and symbols:

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>Description (English)</th>
<th>Symbol (English)</th>
<th>Description (German)</th>
<th>Symbol (German)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5B</td>
<td>batch</td>
<td>batch</td>
<td>Charge</td>
<td>Charge</td>
</tr>
<tr>
<td>ACT</td>
<td>activity</td>
<td>act</td>
<td>Aktivität</td>
<td>Akt</td>
</tr>
<tr>
<td>ANN</td>
<td>year</td>
<td>yr</td>
<td>Jahr</td>
<td>Jahr</td>
</tr>
<tr>
<td>AU</td>
<td>Activity unit</td>
<td>au</td>
<td>Leistungseinheit</td>
<td>leh</td>
</tr>
<tr>
<td>DAY</td>
<td>day</td>
<td>d</td>
<td>Tag</td>
<td>t</td>
</tr>
<tr>
<td>DZN</td>
<td>dozen</td>
<td>dz</td>
<td>Dutzend</td>
<td>dz</td>
</tr>
<tr>
<td>E49</td>
<td>working day</td>
<td>wday</td>
<td>Arbeitstag</td>
<td>a.tag</td>
</tr>
<tr>
<td>EA</td>
<td>each</td>
<td>ea</td>
<td>Stück</td>
<td>stk</td>
</tr>
<tr>
<td>FOT</td>
<td>foot</td>
<td>ft</td>
<td>Fuß</td>
<td>ft</td>
</tr>
<tr>
<td>FTQ</td>
<td>cubic foot</td>
<td>ft³</td>
<td>Kubikfuß</td>
<td>ft³</td>
</tr>
<tr>
<td>GLL</td>
<td>gallon (US)</td>
<td>gal</td>
<td>Gallone (US)</td>
<td>gal</td>
</tr>
<tr>
<td>GRM</td>
<td>gram</td>
<td>g</td>
<td>Gramm</td>
<td>g</td>
</tr>
<tr>
<td>HUR</td>
<td>hour</td>
<td>h</td>
<td>Stunde</td>
<td>std</td>
</tr>
<tr>
<td>INH</td>
<td>inch</td>
<td>in</td>
<td>Zoll</td>
<td>zoll</td>
</tr>
</tbody>
</table>
Object Value Selector (OVS)

The Object Value Selector (OVS) is launched when the user clicks the selection icon beneath an input field. It appears within a modal dialog and allows the user to select one item. For an example and OVS consistency rules see Object Value Selector.

Select Options

Clicking the select options icon next to a field in the advanced find opens the select options dialog to define ranges. See Find Form for detailed information.

Example

Description:  
Project ID:  
Start Date:  
**Date Picker**

The date picker inside a date field allows to select a date from a calendar. See Date & Time for more information.

**Example**

Date range: `<Date> ` - `<Date>`

**Calculator**

The calculator icon opens a calculator which allows to compute values while editing numeric fields.

**Example**

The following example is taken from an FP3.5 ByD System:

```
<table>
<thead>
<tr>
<th>Quantity</th>
<th>Gross</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>10,00</td>
</tr>
</tbody>
</table>

```

**Read-Only and Disabled Fields**

For read-only and disabled fields, no value help dropdown listbox or icon displayed.

**Example:**

- **Amount:** 500
- **Currency:** AUD
- **Date:** 11/26/2011

**More Information**

Help Center
Primary Help
Wording

Specific Topics > Wording

Page Content
Title Case and Sentence Style
Abbreviations
Avoid Redundancy between Group Title and Labels
Button Labels
Common Task Labels
Field Labels
Labels of GAF Steps
Tooltips
Floorplan Titles (Fact Sheet, QAF, OIF, GAF)
Work Center Labels
Work Center View Labels
Version Naming
Section Group Titles
Window Titles
Navigation Tab Titles
Registered Trademarks of Non-SAP Products

Title Case and Sentence Style

The English language generally distinguishes between two styles of capitalization: Title case and sentence style. (Title case is often referred to as initial caps or headline style.) In title case, the first letter of each word is capitalized, except for certain small words such as articles and short prepositions. In sentence style, only the first letter of the sentence or phrase is capitalized. All words after that are written in lowercase, except for proper nouns.

Use title case for the following screen elements on the user interface:

- Menu options, buttons, and quick info texts
- Field, checkbox, and radiobutton labels
- Frame, screen, and dialog box titles
- Tab page titles
- All structure nodes or roles
- Possible entries, help selections, and options in dropdown listboxes
- Column and row headings
- Titles of reports and lists
- All short descriptions such as statuses

In title case, the following words are capitalized:

- Words that carry a meaning (nouns, verbs, adjectives)
- Prepositions and conjunctions with 5 or more letters (for example, Without, During, About)
- Determiners and pronouns (for example, This, All, You)
- The first and last word, no matter what part of speech they are
- Any word after a colon or semicolon

Use sentence style for the following texts on the user interface:

- Messages
- Complete sentences and questions

Abbreviations

In general, do not use any abbreviations on the user interface. Only units of measurement are always abbreviated, see Units of Measurement in Single Value Selector (SVS).

Avoid Redundancy between Group Title and Labels

Use a title which characterizes the section group. If this is not possible think to avoid the group title. Avoid to repeat the section group title in the field labels.

Example: As Delivery is the group title you do not need to repeat Delivery within the field label. Use Status instead of Delivery Status
Button Labels

Create new button labels only if you can not use the generic buttons. Choose a verb that describes the function. Choose an additional noun only if the verb is not sufficient.

For a list of generic button labels see Generic Functions.

Common Task Labels

Label a common task as defined in Common Tasks Menu.

Field Labels

Field labels usually consist of only a noun. In some cases, field labels are composed of a noun and an adjective. Place the adjective after the noun such as Date Requested, Employee Responsible or Date Projected.

Special Usage for ID and Description:

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokenizer is implemented</td>
<td>&lt;BO Type&gt;, such as Contract</td>
</tr>
<tr>
<td>ID and Description are shown in separate fields</td>
<td>&lt;BO Type&gt; ID, such as Contract ID</td>
</tr>
<tr>
<td></td>
<td>&lt;BO Type&gt; Description, such as Contract Description</td>
</tr>
<tr>
<td>ID and Description are shown in a melting field</td>
<td>&lt;BO Type&gt;, such as Contract</td>
</tr>
</tbody>
</table>

For guidelines on field labels for date and time see Date or Date/Time in Field or Column Labels, for address data see Display: Addresses of Organizations and Persons.

Usage of "/" in Field Labels

If you use / in field labels, do not put blanks before and after /.
Example: Date/Time

Labels of GAF Steps

Label the last GAF step Confirmation and the step before the last step Review. Label all other steps in the format <Verb> <Noun>, such as Define Settings and Enter Price. For additional information see Guided Activity.

Floorplan Titles (Fact Sheet, QAF, OIF, GAF)

In edit or display mode you can use in most cases the title syntax <BO Type>: <BO ID>, for example Purchase Order: 345435. If you want to show also the description or name, use <BO Type>: <BO ID> - <BO Description or Name>, for example Service Agent: 345346 - Peter Miller.

• If you refer to hierarchies or versions, use the following syntax:
  <BO Type> or any text describing the task>: <Level 1> --> <Level 2> --> <Level n>
  Use a blank before and after " --> "
  Examples:
Multi-Level BOM Structure: Office Supplies --> Stapler
Car: Van01 --> Red

- If you refer to entities on the same level, use:
  - BO Type or any text describing the task: <Part 1> / <Part 2> / <Part n>
  - Use a blank before and after " / "
  - Example: Product Planning Details: MCREP-0001 / MC64000
- If you refer to items, use:
  - BO Type or any text describing the task: <BO ID> - <BO Item>
  - Use a blank before and after the dash " - "
  - Example: Sales Order Planning Details: 31 - 20

See the respective floorplan chapters for further information.

**Tooltips**

For the wording of tooltips and when to use them see Tooltips.

**Work Center Labels**

Choose nouns as Work Center labels. Avoid abbreviations and do not use special characters like &. For & use and instead.

Examples: General Ledger, Cost and Revenue, Supplier Invoicing

For additional information see Work Center.

**Work Center View Labels**

Choose nouns as Work Center View labels. If possible use the BO type as label, such as Opportunities or Sales Orders. Use also nouns for the sub-view labels. Do not use abbreviations and any special characters like ",", but "and". If the label gets too long it is truncated. Name the first view in a WoC Overview and the last view Reports. Views specific for the WoC appear between them.

For additional information see Work Center.

**Version Naming**

Name versions with their full name: Use "Version 1.x" or replace x with an integer, for example "Version 1.5" or "Version 2".

Do not abbreviate a version like "V1.5".

**Section Group Titles**

Name section group titles as specific as possible. Avoid generic terms like Data and Information in combination with General or Main.

Exception: See Forms & Fields for the group title General Information.

Use title case for section group titles.

- For section groups containing general data use the title Basic Data unless it can be named like the BO: Account, Lead, Supplier.
- For specific section groups find a descriptive term like Business Address or name it like a referred object. Avoid titles such as Details or Data but prefer Business Details or Invoicing Details or Personal Data.

**Window Titles**

The corresponding window title of a floorplan title that contains a colon is reversed at the colon. The reason for this is that the user can better identify the content of a window within the task bar of Windows.

**Example**

For the floorplan title Product Overview: Heating Coil - HAT-980 the corresponding window title is:
NOTE: This does not apply to floorplan titles without colon, such as New Purchase Order. Their window title is identical with the floorplan title.

Navigation Tab Titles

The tab titles in the navigation area at the bottom contain the floorplan title in case the floorplan title does not contain a colon. If it contains a colon the description will be mentioned first in the tab title. The naming logic is similar to the window title.

Registered Trademarks of Non-SAP Products

Registered trademarks of Non-SAP products on the UI have to be mentioned in the format:

<Trademark>®

Example: Microsoft Excel®

For more information see Copyright.

More Information

Abbreviations Related to Date and Time
Display: Addresses of Organizations and Persons
Date or Date/Time in Field or Column Labels
Generic Functions

Standards & Guidelines for Business ByDesign Documentation
Index

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z

A ^
Abbreviations
Abbreviations (Date and Time)
Abbreviations (Wording)
Accelerator Keys
Access Keys
Action Navigation
Adaptation and Personalization
Add Rows
Addresses
Administrative Data
Adobe PDF Forms
Advanced Find
Alignment (Values in Fields)
Alignment (Values in Tables)
Analysis Pattern
Analytics
Approvals View
Attachments
Avoid Redundancy (Titles and Field Lables)

B ^
Browse & Collect
Business Configuration
Button Placement
Business Task Management

C ^
Calendar
Cancel
Change (Mass)
Change (Business Objects)
Changes
Close
Code
Collaboration Window
Columns, Order
Columns, Width
Common Tasks (CTs)
Composition of Floorplans
Confirmation Dialog
Context Menu
Control Center Home
Copy Business Objects
Copyright
Create Business Objects
Custom Pane

D ^
Data Loss Warning (Confirmation Dialog)
Date
Delete (Rows)
Delete (Confirmation Dialog)
Design Principles
Dialog Windows for Attachments
Display-Only Table
Display Totals
Document Center
Document Flow
Dynamic Forms
Editable Tables
Error Messages
Eventing (Forms)
Export

F

F - Fact Sheet
Fields
Find (Basic and Advanced)
Find Form
Floorplans (Basic Ideas)
Floorplans (Composition)
Floorplans (Generic BTM)
Floorplans (Constituting, Content Area Patterns)
Follow-Up Business Objects
Forms
Functions
Functions (Generic BTM)
F-Actions

G

Gantt Chart
Generic Functions
Grouped Tables
Guided Activity (GAF)

H

Help, Sticky Notes, Tags, Shelf
Hierarchical Graph
Hierarchical Tables
Home
Hot Keys

I

Icons
Identification Region
Information Consumer Pattern (ICP)
Information Messages
Image

K

Keyboard Navigation

L

Labels, Fields
Length, Fields
List Pane
Long Text, Translation

M

Mandatory Fields
Mass Change
Master Data Run Object (MDRO)
Master-Detail
Melting Fields
Menus
Message
Message Region
F - Modal Dialog

N

Navigation (Action)
Navigation (Concept)
Negative Values
Newspaper Layout
Notes

O

Object Identifier
Object Instance (OIF)
Object Value Selector (OVS)
Object Worklist (OWL)
Office Integration
On-Screen Explanations
Order of Buttons
Output Management
Overview (Control Center)
Overview (Work Center)

P

Patterns
PDF Forms
Personalization and Adaptation
Pictogram
Picture Legend
Positive Values
Preview Screens
Print List

Q

Quick Activity (QAF)
Quick Filter

R

Read-Only (Notes)
Read-Only (Table)
Recurrence
Remove Rows
Reports View (Control Center)
Reports View (Work Center)
Resolution (Screen)
Rollover Explanations
Rows (Add and Delete)
Rows (Number)

S

Save
Save Draft
Screen Size
Section Group Titles
Search (Basic and Advanced)
Send
Service Map
Short Text Translation
Shortcut Keys
Sorting (Default in OWL)
Status
Sticky Notes
Single Value Selector (SVS)
Symbol
Success Messages
Tab Chain
Tables
Tables (Cell Shading)
Tables (Melting Fields)
Tabs (Reducing in OIFs)
Task-Based OWL (TOWL)
Task-Execution Floorplans
Task Region
Text Translation
Time
Time (Elapsed)
Time Periods
Time (Recurrence)
Time Stamps
Time Zone
Title, Floorplan
Tokenizer
Tooltips
Toolbar Buttons
Translation
Truncation (Texts in Tables)

Units and Values in Fields

Value Help
Values (Positive, Negative)
Values and Units in Fields
Version Naming
Visualization of Fields

Warning for Data Loss
Warning for Locked Record
Warning Messages
Width of Columns
Window (Collaboration)
Wording
Work Center (WoC)
Worklists
Wrapping (Texts in Tables)

You Can Also (YCA)
More Guidelines (Mobile, Partner)

Mobile Player Guidelines iPhone

Mobile applications are implemented in the development tool "UI Designer" using the standard ByD floorplans and patterns. A player software interprets the the floorplans and patterns and arranges the screen content on the iPhone as described in the ByD iPhone Mobile Player Guidelines (PDF).

Mobile Player Guidelines BlackBerry

Similar to the mobile player guidelines for iPhone the guidelines for the BlackBerry are available as well. ByD BlackBerry Mobile Player Guidelines (PDF).

Mobile Player Guidelines Windows Phone 7

For Microsoft Windows Phone 7 the player guidelines are released.
ByD Windows Phone 7 Player Guidelines (PDF)

iPad Gestures Styleguide

The iPad Gestures Styleguide (PDF) specifies the gestures which are used in ByD iPAD applications.

Partner Styleguide

Partners develop applications on the basis of the ByD UI Styleguide. They receive a condensed version: Partner Styleguide (PDF)

Forms Styleguide

Styleguide for Adobe PDF Forms
The following picture shows the most often used elements:

1. Title Bar
2. Identification Region
3. Toolbar
4. Disabled button
5. Active (enabled) button with help
6. Primary Help
7. Tabs and subtabs. The active tab is shaded and in bold font, the active subtab is in bold font.
8. The paranthesis '< >' are a placeholder where you can fill in variable text.
9. Fix text is written without paranthesis, such as the Administrative Data section group.
10. Placeholder for icons
11. Selected row in a table
12. Status icons "Red" (arrow down), "Yellow" (double arrow), "Green" (arrow up)
13. Context menu
## Abbreviations

### Fundamentals and Background > Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation / Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALP</td>
<td>Advanced List Pane</td>
</tr>
<tr>
<td>AP</td>
<td>Analysis Pattern</td>
</tr>
<tr>
<td>BCP</td>
<td>Browse &amp; Collect (Pane)</td>
</tr>
<tr>
<td>BO</td>
<td>Business Object</td>
</tr>
<tr>
<td>BTM</td>
<td>Business Task Management</td>
</tr>
<tr>
<td>ByD</td>
<td>SAP Business ByDesign</td>
</tr>
<tr>
<td>ByD FPx.y</td>
<td>Business ByDesign Feature Pack (Version x.y)</td>
</tr>
<tr>
<td>CC</td>
<td>Control Center</td>
</tr>
<tr>
<td>CNP</td>
<td>Contextual Navigation Panel</td>
</tr>
<tr>
<td>CNR</td>
<td>Contextual Navigation Region</td>
</tr>
<tr>
<td>CNR</td>
<td>Contextual Navigation Region</td>
</tr>
<tr>
<td>CW</td>
<td>Collaboration Window</td>
</tr>
<tr>
<td>DC</td>
<td>Document Center</td>
</tr>
<tr>
<td>DDL</td>
<td>Dropdown Listbox</td>
</tr>
<tr>
<td>FF</td>
<td>Find Form</td>
</tr>
<tr>
<td>FP</td>
<td>Form Pane</td>
</tr>
<tr>
<td>FS</td>
<td>Fact Sheet</td>
</tr>
<tr>
<td>GAF</td>
<td>Guided Activity (Floorplan)</td>
</tr>
<tr>
<td>GLP</td>
<td>Grouped List Pane</td>
</tr>
<tr>
<td>HC</td>
<td>Help Center</td>
</tr>
<tr>
<td>HG</td>
<td>Hierarchical Graph</td>
</tr>
<tr>
<td>HLP</td>
<td>Hierarchical List Pane</td>
</tr>
<tr>
<td>ICP</td>
<td>Information Consumer Pattern</td>
</tr>
<tr>
<td>ID</td>
<td>Identifier</td>
</tr>
<tr>
<td>IDR</td>
<td>Identification Region</td>
</tr>
<tr>
<td>LP</td>
<td>List Pane</td>
</tr>
<tr>
<td>MD</td>
<td>Modal Dialog</td>
</tr>
<tr>
<td>MDRO</td>
<td>Mass Data Run Object</td>
</tr>
<tr>
<td>MR</td>
<td>Message Region</td>
</tr>
<tr>
<td>OIF</td>
<td>Object Instance (Floorplan)</td>
</tr>
<tr>
<td>OVS</td>
<td>Object Value Selector</td>
</tr>
<tr>
<td>OWL</td>
<td>Object Worklist</td>
</tr>
<tr>
<td>QAF</td>
<td>Quick Activity (Floorplan)</td>
</tr>
<tr>
<td>RR</td>
<td>Roadmap Region</td>
</tr>
<tr>
<td>SVS</td>
<td>Single Value selector</td>
</tr>
<tr>
<td>TOWL</td>
<td>Task-based Object Worklist</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>TR</td>
<td>Task Region</td>
</tr>
<tr>
<td>UI</td>
<td>User Interface</td>
</tr>
<tr>
<td>UIBB</td>
<td>User Interface Building Blocks</td>
</tr>
<tr>
<td>UoM</td>
<td>Unit of Measurement</td>
</tr>
<tr>
<td>WoC</td>
<td>Work Center</td>
</tr>
</tbody>
</table>

Top