User Guide

ARGUS Developer 8.2.3

9/6/2019

User Guide

ARGUS Developer 8.2.3 9/6/2019

Published by:

ARGUS Software, Inc.

750 Town and Country Blvd Suite 800

Houston, TX 77024

Telephone (713) 621-4343

Facsimile (713) 621-2787 [www.argussoftware.com](http://www.argussoftware.com/)

Information in this document is subject to change without notice and represents no commitment on the part of ARGUS Software, Inc.

This document is copyright 2019, ARGUS Software, Inc. All rights reserved. This document is confidential and proprietary information of ARGUS Software, made available only under a license agreement and or other agreements containing obligations of confidentiality.

"ARGUS" and “ARGUS Enterprise” are trademarks of ARGUS Software, Inc. All other trademarks and registered trademarks are property of their respective companies.

**Table of Contents**

[Getting Started 11](#_bookmark0)

[Welcome 11](#_bookmark1)

[Legal Notice 11](#_bookmark2)

[Activate ARGUS Developer 12](#_bookmark3)

[Starting Work 12](#_bookmark4)

[Starting a New Project 13](#_bookmark5)

[Project Start Date 14](#_bookmark6)

[Project Start Date Dependencies 15](#_bookmark7)

[Project Details 17](#_bookmark8)

[Application Workspace 19](#_bookmark9)

[The Ribbon 19](#_bookmark10)

[Home ribbon 20](#_bookmark11)

[Budget ribbon 22](#_bookmark12)

[Configuration ribbon 23](#_bookmark13)

[Cash Flow ribbon 24](#_bookmark14)

[Data Check 26](#_bookmark15)

[Backstage 28](#_bookmark16)

[Saving Files 28](#_bookmark17)

[Introduction 28](#_bookmark18)

[Files 29](#_bookmark19)

[Introduction 29](#_bookmark20)

[Portfolios and Projects 30](#_bookmark21)

[Purpose 30](#_bookmark22)

[Import/Export 37](#_bookmark43)

[Importing/Exporting Data 37](#_bookmark40)

[Import Developer File 38](#_bookmark44)

[Create a new portfolio and add project 39](#_bookmark45)

[Import Portfolio, Project or Cost Code Set 39](#_bookmark46)

[Import Invoice Data 39](#_bookmark47)

[External Data Sources 41](#_bookmark48)

[Import Invoice from External Data Source 41](#_bookmark49)

[Data 42](#_bookmark50)

[Import Area Data 43](#_bookmark52)

[Exporting Data 43](#_bookmark54)

[Clear Invoice Data 46](#_bookmark58)

[Cost Codes 47](#_bookmark59)

[Defining Cost Code Format 48](#_bookmark61)

[Add Format 48](#_bookmark62)

[Copy Format 50](#_bookmark64)

[Delete Format 50](#_bookmark65)

[Cost Code Sets 51](#_bookmark66)

[Cost Code Mapping 53](#_bookmark67)

[Exporting a Cost Code Set 60](#_bookmark68)

[Help 62](#_bookmark69)

[Control Panel 63](#_bookmark70)

[Control Panel 63](#_bookmark71)

[Developer Database 64](#_bookmark72)

[Introduction 64](#_bookmark73)

[Change/Manage Files Outside the Database 64](#_bookmark74)

[Users 65](#_bookmark75)

[Purpose 65](#_bookmark76)

[My Account 66](#_bookmark77)

[Purpose 66](#_bookmark78)

[General 68](#_bookmark79)

[Purpose 68](#_bookmark80)

[Error Reporting 71](#_bookmark81)

[General Preferences 71](#_bookmark82)

[General 71](#_bookmark83)

[Database Settings 74](#_bookmark84)

[Purpose 74](#_bookmark85)

[User Groups 75](#_bookmark86)

[Purpose 75](#_bookmark87)

[System Permissions 76](#_bookmark88)

[Purpose 76](#_bookmark89)

[Logon Settings 79](#_bookmark92)

[Cash Flow Preferences 80](#_bookmark93)

[Summary Preferences 83](#_bookmark94)

[Licence Options 88](#_bookmark95)

[Refresh Current Project/All Projects 89](#_bookmark96)

[Refresh Current Project 89](#_bookmark97)

[Refresh All Projects 89](#_bookmark98)

[Information 89](#_bookmark99)

[Calculation Assumptions 91](#_bookmark100)

[Assumptions 91](#_bookmark101)

[Expenditure 92](#_bookmark103)

[Receipts 94](#_bookmark104)

[Finance 98](#_bookmark107)

[Calculation 100](#_bookmark109)

[KPIs 104](#_bookmark111)

[Interest Sets 106](#_bookmark113)

[Inflation/Growth 108](#_bookmark114)

[Residual 109](#_bookmark115)

[Distribution 112](#_bookmark116)

[Timescale & Phasing 113](#_bookmark117)

[Development Timescale 113](#_bookmark118)

[Ribbon 114](#_bookmark119)

[Editing Timescale & Phasing If a Budget Has Been Set 116](#_bookmark120)

[Project Start Date 116](#_bookmark121)

[Project Start Date Dependencies 117](#_bookmark122)

[Phase Start Date 119](#_bookmark123)

[Phases 120](#_bookmark124)

[Project and Phase Information 120](#_bookmark125)

[Development Phases 121](#_bookmark126)

[Deleting Phases 122](#_bookmark129)

[Delete phase options 123](#_bookmark130)

[Merging Phases 123](#_bookmark131)

[Moving Phases 124](#_bookmark132)

[Grouping Phases 124](#_bookmark133)

[Stages 126](#_bookmark134)

[Development Stages 126](#_bookmark135)

[Entering the Stage Timescale 127](#_bookmark136)

[Dependencies 129](#_bookmark137)

[Linking Phases and Stages 129](#_bookmark138)

[Phase Dependencies 130](#_bookmark139)

[Stage Dependencies 131](#_bookmark140)

[To set stage dependencies 131](#_bookmark141)

[To set a fixed stage start date 131](#_bookmark142)

[To make a stage start when another stage finishes 131](#_bookmark143)

[To make a stage start when another stage starts 132](#_bookmark144)

[To make a stage start when a stage in another phase finishes or starts 132](#_bookmark145)

[To enter a lead in or lag between stages 132](#_bookmark146)

[Creating Dependencies between Phases and Stages 132](#_bookmark147)

[Validation 135](#_bookmark148)

[Reporting 136](#_bookmark149)

[Timescale and Phasing Graph Report 136](#_bookmark150)

[Structured Finance 137](#_bookmark151)

[Purpose 137](#_bookmark152)

[Functionality 137](#_bookmark153)

[Assumptions Setup 139](#_bookmark154)

[Finance Structures 140](#_bookmark155)

[Finance Module: Cash Flow View 186](#_bookmark177)

[General Principles of Structured Finance 189](#_bookmark178)

[IRR Calculations 190](#_bookmark179)

[Timed Contributions 192](#_bookmark180)

[Timed Repayments 192](#_bookmark181)

[Timed Profits 192](#_bookmark182)

[Timed Finance Events 193](#_bookmark183)

[Reporting Structured Finance 193](#_bookmark184)

[Financing Tab 194](#_bookmark185)

[Quick Reference - Line Item Finance 194](#_bookmark186)

[Quick Reference - Calculate the Loan Advanced 197](#_bookmark187)

[Purpose 197](#_bookmark188)

[Capitalised Rent and Sales 199](#_bookmark189)

[Capitalised Rent and Unit Sales 199](#_bookmark190)

[Unit Sales 217](#_bookmark194)

[Residential Sales 222](#_bookmark195)

[Quick Entry Area Schedule 233](#_bookmark196)

[Deposits as a Source of Funding 237](#_bookmark197)

[Purpose 237](#_bookmark198)

[Options for Capitalised Rent and Unit Sales 243](#_bookmark202)

[Operated Assets 247](#_bookmark203)

[Use Classes 256](#_bookmark205)

[Entering Costs and Receipts 257](#_bookmark206)

[Definition (Editing Costs and Receipts) 257](#_bookmark207)

[Purpose 257](#_bookmark208)

[To open an editor 258](#_bookmark209)

[To change the data field layout 258](#_bookmark210)

[Creating and Editing Items 258](#_bookmark211)

[Percentage Related Items 262](#_bookmark212)

[Timing and Distribution 270](#_bookmark213)

[Custom Label Descriptions 275](#_bookmark214)

[Acquisition Costs 277](#_bookmark215)

[Acquisition Price 277](#_bookmark216)

[To make all bands in a scheme Non-Cumulative 280](#_bookmark217)

[To Delete a Scheme 280](#_bookmark218)

[Construction Costs 282](#_bookmark219)

[Cost Distribution 283](#_bookmark220)

[Infrastructure Costs 285](#_bookmark221)

[Professional Fees 289](#_bookmark222)

[Standard Professional Fees 289](#_bookmark223)

[Other Professionals 289](#_bookmark224)

[Marketing, Letting, & Disposal Costs 290](#_bookmark225)

[Marketing Costs 290](#_bookmark226)

[Letting Fees 290](#_bookmark227)

[Purchaser's Costs 291](#_bookmark228)

[Introduction 291](#_bookmark229)

[Sales Fees 293](#_bookmark230)

[Additional Data 294](#_bookmark231)

[Arrangement Fee 294](#_bookmark232)

[Development Management Fee 295](#_bookmark233)

[Purpose 295](#_bookmark234)

[To enter a percentage of Development Costs 295](#_bookmark235)

[Rent Review Fees 295](#_bookmark236)

[Additional Revenue 296](#_bookmark237)

[Data View Cycle 296](#_bookmark238)

[To use a revenue to reduce the cost balance 296](#_bookmark239)

[Additional Costs 296](#_bookmark240)

[Additional Related 297](#_bookmark241)

[To make the cost or revenue repeat over time 297](#_bookmark242)

[To customise the timing or distribution 297](#_bookmark243)

[To choose the appraisal report location 297](#_bookmark244)

[Rent Additions/Costs 298](#_bookmark245)

[Sales Additions/Costs 299](#_bookmark246)

[Developer's Profit 300](#_bookmark247)

[Cash Flow 301](#_bookmark248)

[Project Cash Flow 301](#_bookmark250)

[Background 301](#_bookmark251)

[Cash Flow Grid 302](#_bookmark249)

[Status Bar 302](#_bookmark252)

[Status bar options 303](#_bookmark253)

[Cash Flow Context Tab 304](#_bookmark254)

[Cash Flow Commands 304](#_bookmark255)

[Finance Cash Flow: Basic Finance (Interest Sets) 314](#_bookmark256)

[Structured Finance Cash Flow 321](#_bookmark257)

[Cash Flow View Cycles 322](#_bookmark258)

[Cash Flow Search 323](#_bookmark259)

[Grouping Rows 324](#_bookmark260)

[Budget 330](#_bookmark261)

[Budgeting 330](#_bookmark262)

[Setting up the Budget Cash Flow tab 330](#_bookmark263)

[Budget Cash Flow 332](#_bookmark266)

[Budget ribbon tab 332](#_bookmark267)

[Budget Calculations 353](#_bookmark275)

[Value Added Tax (VAT) 354](#_bookmark276)

[Reporting 356](#_bookmark277)

[Summary Report 356](#_bookmark278)

[Performance Measures 357](#_bookmark279)

[Reports 361](#_bookmark280)

[Printing Reports 361](#_bookmark281)

[Setup Report Groups 361](#_bookmark282)

[Print Preview 363](#_bookmark283)

[Print Preview Ribbon 364](#_bookmark284)

[Report Setup 366](#_bookmark285)

[Report Options 366](#_bookmark286)

[Report Content 368](#_bookmark287)

[Page Setup 370](#_bookmark288)

[Headers & Footers 370](#_bookmark289)

[Cover Sheet 371](#_bookmark290)

[Budget Reporting 373](#_bookmark291)

[Budget Reports Ribbon Commands 373](#_bookmark292)

[View Budget Reports 374](#_bookmark293)

[Generate Report 376](#_bookmark294)

[Enhanced Excel Analytics 376](#_bookmark295)

[Excel Integrated Analytics 376](#_bookmark296)

[Exporting into an Excel Template (xltx) file 379](#_bookmark297)

[How to Download into an existing Excel (.xlsx) Workbook 382](#_bookmark298)

[Overview of contents of the Excel Template Workbook 383](#_bookmark299)

[The Cash Flow worksheet contents are user-configurable in the following ways: 391](#_bookmark300)

[Analysis 393](#_bookmark301)

[Sensitivity Analysis 393](#_bookmark302)

[Creating a Sensitivity Analysis 395](#_bookmark303)

[Viewing the Analysis 395](#_bookmark304)

[Creating a Sensitivity Analysis 400](#_bookmark305)

[Sensitivity Options 403](#_bookmark306)

[Before Running the Analysis 404](#_bookmark307)

[Running the Analysis 405](#_bookmark308)

[Viewing the Analysis 405](#_bookmark309)

[Analysis Scenarios 410](#_bookmark310)

[Goal Seeking 411](#_bookmark311)

[Goal Seeking Based on Area 412](#_bookmark312)

[Goal Seeking Based on Cash Flow 412](#_bookmark313)

[Problems with Goal Seeking 413](#_bookmark314)

[Analysis Charts 414](#_bookmark315)

[Purpose 414](#_bookmark316)

[IRR Scenarios 417](#_bookmark317)

[Key Performance Indicators 418](#_bookmark318)

[Budget KPIs 420](#_bookmark319)

[Working with Templates 423](#_bookmark320)

[Modify an existing template 423](#_bookmark321)

[Using an Existing Template 423](#_bookmark322)

[Importing and Exporting 425](#_bookmark323)

[Importing/Exporting Data 425](#_bookmark324)

[Import Developer File 426](#_bookmark325)

[Create a new portfolio and add project 427](#_bookmark326)

[Import Portfolio, Project or Cost Code Set 427](#_bookmark327)

[Import Invoice Data 427](#_bookmark328)

[External Data Sources 428](#_bookmark329)

[Import Invoice from External Data Source 429](#_bookmark330)

[Data 430](#_bookmark331)

[Import Area Data 431](#_bookmark332)

[Exporting Data 431](#_bookmark333)

[Clear Invoice Data 434](#_bookmark334)

[Currency Conversion 436](#_bookmark335)

[Working with Other Currencies 436](#_bookmark336)

[To add a new currency conversion 436](#_bookmark337)

[To delete a currency conversion 436](#_bookmark338)

[To convert the project to a different currency 436](#_bookmark339)

[Data Checker 438](#_bookmark340)

[Data Status Panel 438](#_bookmark341)

[Viewing the Data Checker 438](#_bookmark342)

[Project Data 438](#_bookmark343)

[Load Notes 438](#_bookmark344)

[Data Checker Contents 439](#_bookmark345)

[Fixing Data Checker Entries 439](#_bookmark346)

[Filters 440](#_bookmark347)

[System Configuration 443](#_bookmark348)

[General 443](#_bookmark349)

[Purpose 443](#_bookmark350)

[Error Reporting 446](#_bookmark351)

[Format 446](#_bookmark352)

[Colours 448](#_bookmark353)

[Folder Locations 449](#_bookmark354)

[Cost Codes 450](#_bookmark355)

[Data File Options 451](#_bookmark356)

[File Format Options 451](#_bookmark357)

[Map Location 454](#_bookmark358)

[Purpose 454](#_bookmark359)

[Map Location URL 454](#_bookmark360)

[Changing Settings and Display Preferences 455](#_bookmark361)

[Preferences Window 456](#_bookmark362)

[Index 457](#_bookmark363)

# Getting Started

## Welcome

ARGUS Developer is an established real estate appraisal software program in use by thousands of owners, commercial developers, home builders, land developers, agents, and financial institutions throughout the world.

Combining pro forma capability with sensitivity analysis and a powerful discounted cash flow provides you with a flexible, consistent, and stable platform. Executive level views of single and multi-phased projects allow changes to be assessed instantly. A finance component provides for detailed debt and equity financing and advanced waterfall profits for precise deal structuring.

The new Snapshot module allows you to import actuals transactions from your accounting systems to allow up-to–date monitoring and tracking of your Development project.

By reducing risk and freeing resources within your organisation, ARGUS Developer helps you to focus on your core business.

## Legal Notice

The information, analysis, and results contained or derived from ARGUS Developer are not intended to be used or relied upon for tax, accounting, investment or legal advice.

Licensor cannot provide you tax or investment advice and does not guarantee the applicability or accuracy of this information in connection with your individual circumstance. Any tax or other financial calculations, information, or analysis contained in ARGUS Developer are not intended to be used, and cannot be used, for the purpose of avoiding international or U.S. federal, state, region, province or other local tax obligations or penalties.

Before taking any action or inaction with respect to this information, you should consult with your individual licenced financial or tax professional.

ARGUS Developer 8.2.3 Help v. 0.1

## Activate ARGUS Developer

When you install Developer, open the application and activate the product using the product key given to you by the ARGUS team.

See also, Licence Options.

For full instructions on activating ARGUS Developer, please refer to the ARGUS Developer Installation Guide found at https://argus.altusgroup.com/argus-developer- downloads/.

## Starting Work

When you start working with Developer for the first time, there are some procedures that you should become familiar with – you will use them for most new projects. Run through the following check list to quickly get started on your new project.

New Project Select list

1. Start a new project
2. Set the project start date
3. Select and make changes to calculation assumptions
4. Enter the project timescale and phasing
5. Choose the finance mode – either structured or 100% financed
6. Enter project, property and location details
7. Enter project revenues and costs

## Starting a New Project

File tab>Projects>Add Project>default.ptl

When you open ARGUS Developer, a new blank project creates automatically. To create a new project at any other time:

1. Click on the **File tab>Projects>Add Project.**
2. Select **Default Project Template** - If you have more than one project template installed, select the one you want from the list
3. The new project creates with your standard calculation options already set.

## Project Start Date

Navigation: Home Ribbon>Timescale & Phasing>Timescale>Project Start Date Navigation: Home Ribbon>Timescale & Phasing>Start Date

When you start a new project, the current date from your PC is used to set the project start date. If this is not the date on which your project starts, you will need to specify a new start date.

1. In the Timescale & Phasing group on the Home tab, click the **Start Date**

ellipsis button.

1. In the **Date Picker** field, choose a start date.

You can choose any start date from the **Date Picker** field – even if it is earlier than today’s date.

1. Click **OK**.
2. Result: The **Project Start Date Dependencies** window appears.

## Project Start Date Dependencies

When the project start date is changed, the program automatically adjusts the time scale of each of the phase dates, development stages, and all costs and revenue items within each phase. Before the project can be updated, the program needs to know whether to move items relative to their existing dates, or to keep them fixed so that they do not change. Dates like the Phase Start Date, Development Stage Dates, and Cash Flow Dates must all be adjusted.

The Project Start Date Dependencies allows you to specify how the dates will be changed.

* + You can make the dates automatically change relative to the project start date.
  + You can keep the same dates by adjusting lead in times. The following options are available:

### Adjust phase start date

Specify how phase start dates are updated.

Phase start dates

* **Keep the same phase start dates:** The dates are not changed for any phases that start after the project start date. Any phases that start before the new project start date will be changed to start on the project start date.
* **Keep the same lead in period from the project start date:** Changes each phase start date so that the same lead in period is maintained between the project start date and the phase start date.
* **Make all phases start on the project start date:** Makes each phase start date the same as the project start date.

### Adjust phase timescale

Specify how all timing fields are updated. You can adjust a phase’s timing relative to a specific date, a specific period or the project start date.

The term items in each of the headings below is used to denote any of the following:

* Development state dates
* Dates for costs or revenues
* Dates for contributions/repayments/mortgage in structured finance
* Construction/Lease/Capitalisation Dates
* Any other data that depends on choosing a date for its timing Items with manual period timing

If you have items that start on a specific period, choose from:

* **Keep the same period:** Moving the data so that it starts on the same period.
* **Change the period so that is keeps the same offset from the start of the phase:** Moving the data so that it starts on the same number of periods after the new phase start date.

Items with manual date timing

If you have items that start on a specific date, choose from:

* **Keep the same date:** Moving the data so that it starts on the same date.
* **Change the date so that it keeps the same offset from the start of the phase:** Moving the data so that its start date has the same lead in time from the new phase start date.

Items anchored to Project Start and End stages

If you have items that start on a specific development stage date, choose from:

* **Keep the same offset from the project start or end:** Moving the data so that the same Offset period is maintained from the phase start date.
* **Change the anchor so that it keeps the same offset from the start of the phase:** Moving the data so that its start date has the same Offset period from the development stage’s start date.

## Project Details

Navigation: Home Ribbon>Project

Use the **Project** tab to enter property and location details for the project.

### General

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
| Property Name | Enter the name of the property or development. |  |
| Title Line 1 & 2 | Enter title lines. | Title lines appear on reports. |
| Job Number | Enter a unique reference number or code used as an identifier for the Project record. | Reference numbers or codes usually come from your project accounting system. |
| Version Reference | Type a unique identifier like Version 1. | This reference distinguishes different versions of the same  project. The Reference |

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
|  |  | Number displays as a column in the Projects grid. |
| Project Type | Enter a description for the type of project. |  |
| Project Manager | Enter the name of the project manager. |  |
| Project Size | Enter the project size. |  |
| Created By | Enter the name of the person who created the project in ARGUS Developer. |  |

Location

The fields in this section identify the location and are enable the property to be shown on the map tab at the bottom right.

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
| Address Line 1 | Enter the property address. |  |
| Address Line 2 | Enter additional information for the property address if needed. |  |
| Address Line 3 | Enter additional information for the property address if needed. |  |
| City | Enter the city name. |  |
| State/Territory | Enter the state or territory name. |  |
| Postal Code/Zip | Enter the postal or zip code. |  |
| Country | Enter the country name. |  |
| Map Location | Enter the URL of the property location or generate the Project URL. | For Developer to generate the URL, the address fields above must be completed.  You can also search the address from a web browser and copy & paste the URL into this field. |

Additional Tabs

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
| No Images | Right click in the empty field to add and manipulate images. You may choose from the following options:   * New Image * Delete Image * Centre Image Within Frame * Keep Height & Width in Proportion * Stretch Image to Fill Frame | If you added more than one image, you can click **Previous** or **Next** to navigate backward and forward in your image set. |
| Notes | Enter notes in the empty field. | Notes can be printed via the  **Project Notes Report**. |
| Map | Option: Search and display properties from the satellite map.  Option: Click **Make Project URL** to generate the URL for the **Map Location** field.  Option: Click **Refresh** if there are any changes to address or URL to update map view. | **Make Project URL** only generates if there is an address entered and a default web browser is set in the Control Panel Map Location.  To update **Map Location** when an address change occurs, clear this field and click **Make Project URL** to update. |

## Application Workspace The Ribbon

All the commands and tools you need to put together development projects are now exposed and readily available on the ribbon. There is a single command centre that brings all the essentials together in a visual format. When you know how to use the ribbon in Developer, you can use the same principles as you do in Microsoft Office programs.

Figure 1: Three basic components of the ribbon A ribbon has three basic components:

* **Tabs:** Displayed along the ribbon, each tab represents the core tasks you do in Developer.
* **Groups:** Groups are sets of related commands displayed in the tabs. They provide all of the commands necessary to perform a single type of task. They remain on display and are readily available, no matter what you are working on in Developer.
* **Commands:** Arranged within the groups, commands can be buttons, menus, or boxes where you enter information.

## Home ribbon

The first tab in ARGUS Developer is the Home tab. The main task in Developer is creating and editing development projects, so the commands on the Home tab are the ones that will be used most commonly: setting calculations assumptions (in the Assumptions group), creating a time scale (in the Time scale & Phasing group), entering finance structures (in the Finance group), entering revenues and costs (in the Definition group), and editing or analysing data (in the Distribution & Analysis group).

The Home tab above the ribbon displays the following groups:

* Reports
* Calculation Assumptions
* Timescale & Phasing
* Finance
* Definition
* Distribution & Analysis

### Reports

This section allows you to preview reports before printing. Click the drop down for Preview Reports to select a report.

Click the top portion (page and magnifying glass icon) to see the last report viewed.

### Calculation Assumptions

This section allows you set up your calculation assumptions. Choose from:

* Assumptions
* Interest
* Inflation
* Residual

### Timescale and Phasing

This section allows you set up your calculation assumptions. Choose from:

* Timescale
* Start Date
* Add New Phase
* Insert New Phase
* Copy Phase
* Delete Phase
* Group Project Phases
* Rename Phase

### Finance

This section allows you to select a finance type.

Finance Type

Select from the following options in the drop-down list.

* Basic Finance
* Structured Finance

VAT

* VAT

Currency

* Currency

### Definition

This section allows you to define revenue and cost items.

Capitalised Areas

Select from the following options in the drop-down list.

* Capitalised Rent
* Rent Additions and Costs

Sales Areas

Select from the following options in the drop-down list.

* Unit Sales
* Single Unit Sales
* Multiple Occupancy Unit Sales
* Sales Additions and Costs
* Escrow Account for Sales Deposits
* Operated Assets

Select from the following options in the drop-down list.

* Operated Assets Costs

Select from the following options in the drop-down list.

* Fixed Land Value
* Other Acquisition Costs
* Other Construction Costs
* Municipal Costs
* Section 106 Costs
* Section 278 Costs
* Other Professional Fees
* Additional Costs
* Additional Related Item
* Developer's Profit

Revenues

Select from the following options in the drop-down list.

* Additional Revenue

### Distribution & Analysis

This section allows you to model timing, distribution, and scenarios. Choose from:

* Data Distribution
* Sensitivity Analysis
* Goal Seek
* IRR Scenarios

## Budget ribbon

The Budget tab at the top of the ribbon displays the following groups:

### Create Budgets

This section allows you to access and modify budget information. Choose from:

* Original
* Revised
* Delete Revised
* Released Budgets

### Allocation & Correction

This section allows you to:

1. **Invoice Allocation:** Allocate invoices that have been imported into your model.
2. **Invoice Drill Down:** Display the invoice detail for the selected cell in the Budget Cash Flow.

### Data Distribution

This section allows you to:

* + **Spread Variance:** Update your forecast due to variance.
  + **Contingency Fund**: Transfer funds between a specified cost and a contingency fund.
  + **History**: View details of amounts transferred between contingency funds and cost code line items.

### Budget Control

This section will allow you to permanently lock open periods to which actual transactions have been imported.

#### Close Periods

* + **Released Budget Selection:** Select which released budget is displayed.

View

Select from the following options in the drop-down list.

* + Actual/Forecast
  + Original Budget
  + Revised Budget
  + Current Forecast See Also

Budget Cash Flow

## Configuration ribbon

The Configuration tab at the top of the ribbon displays the following groups:

### Configuration Templates

This section will allow you to

* + Stamp Duty
  + Use Classes

### Workspace

This section will allow you to make changes to your workspace.

Workspace Tabs

Select from the following options in the drop-down list.

* + Project Tab
  + Definition Tab
  + Cash Flow tab
  + Structured Finance Cash Flow tab
  + Budget Cash Flow Tab
  + Released Budget Cash Flow tab
  + Summary Tab
  + Data Checker
  + KPI Dashboard
  + KPI Budget Cash Flow
  + Lock Workspace

Restore Workspace

Select from the following options in the drop-down list.

* + Restore Workspace to Default Layout
  + Restore Quick Access Toolbar to defaults
  + Restore Dialog Size & Position
  + Restore Confirmation Prompts

Templates

Select from the following options in the drop-down list.

Standard Skins

* + Blue
  + Coffee
  + Silver Office Skins
  + Office 2007 Blue
  + Office 2007 Green
  + Office 2007 Pink
  + Office 2007 Silver
  + Office 2010 Blue
  + Office 2010 Silver
  + Office 2013 Light Gray
  + Office 2013 White

### KPI Dashboard

This section will allow you to select/create a KPI Dashboard template.

* + **Name**
  + **Dashboard Template**

### Diagnostics

This section will allow you to check and repair row order.

* + Check Row Order
  + Repair Row Order

## Cash Flow ribbon

When you click into the Project Cash Flow or the Finance Cash Flow for the first time, the ribbon bar shows the Cash Flow Tools Context tab, highlighted in green. The Cash Flow Tools context tab contains all the commands you will need when you are working with cash flows.

When you click into another part of the program, the Cash Flow Tools context tab will be hidden. The next time you click into the cash flows, the context tab will be shown, but you will need to click it to show the commands.

The Cash Flow tab at the top of the ribbon displays the following groups:

### Clipboard

This section allows you to use the standard clipboard functions to move data. Choose from:

* + Paste
  + Copy Cell
  + Copy Row
  + Copy Distribution

### Editing

This section allows you to manipulate data in multiple ways.

Edit

Select from the following options in the drop-down list.

* + Source Data
  + Heading
  + Hide Lock
  + Relate
  + Sign
  + Interest
  + Inflation
  + Add Area

Additional commands

* + Add
  + Delete
  + Notes

Fill

Select from the following options in the drop-down list.

* + Fill

Clear

Select from the following options in the drop-down list.

* + Cells
  + Row
  + All Rows
  + Tagged Rows

Row Properties

* + Row Properties

### View

This sections will allow you to choose how to view data. Choose from:

* + Expand
  + Collapse
  + Cycle
  + Order
  + Interest Totals
  + Cost Codes

### Rows

This sections will allow you sort and search data. Choose from:

* + Sort
  + Find

Group

Select from the following options in the drop-down list.

* + Group Rows
  + Custom Grouping
  + Show Summary Total for Each Group
  + Merge Section Summaries by Department Category
  + Group Cost Code Level See Also

Cash Flow Structured Finance

## Data Check

When you click the Data Checker tab, the ribbon bar shows the Data Check context tab.

### Event Filters

This section allows you to filter an event. Choose from:

* + Event Filter
  + Edit
  + New
  + Delete
  + Rename

Refresh

Updates the Data Check.

### Severity Filters

This section allows you to select which messages to display. Choose from:

* + Errors
  + Warnings
  + Hints
  + Data
  + Notes

### Data Check Report

This section allows you to preview or print a Data Check report. Choose from:

* + Preview
  + Print

# Backstage

## Saving Files

Navigation: File tab>Backstage

## Introduction

You can choose whether to save file changes to the database or make changes to files outside the database.

### Saving Files

Save to Portfolio

Click to commit the changes to the open project to the database. Choose from:

* + Add to an existing portfolio.
  + Create a new portfolio and add the project.

Note: If you have not logged into the database, the Logon Details popup appears.

Save to File or Portfolio

Click to save the project to the same location from which it was opened. If you opened the project from the database, the system saves the changes to the database file. If you opened the project from a flat file (.wcfx), the system saves the changes to the flat file outside the database.

Save to File

Click to browse to a file location. You can save the project in a variety of file formats. Choose from:

* **Save project without budget data but include cost codes:** Opens the Save As popup with the .wcfx format as the default file format.
* **Export project without budget data but include cost codes:** Opens the Save As popup popup. Choose either .wcfx or .xml file formats.
* **Export project with all budget data and cost codes:** Opens the Export Wizard. Also Save the project to the database

Ensures any changes not yet committed to the database are saved. Click the check box to keep the project file in sync with the database.

Close

Closes the project currently open in either the database or held in memory.

## Files

Navigation: File tab>Files.

## Introduction

The **Files** command allows you to:

* Open projects as .wcfx or .wcf files without committing them to the database.
* Save .wcfx or .wcf and Save As project files without committing them to the database.
* Create a new project in memory without committing them to the database.
* Send project files or report groups via email.

### Open

This section displays options for opening/creating/saving/sending files.

Open

Allows you to browse to and open a project file in ARGUS Developer without adding it to the database. Choose from:

* Developer Files (.wcf, .wcfx, .xml)
* Developer Templates (.ptl, ptlx
* Backup Files (.wck, .wckx)
* XML Files (.xml)
* Text Files (.txt)

Note: If you are not logged on to the database and open/create a project file into memory, the project will not display in the Project browser and functions that rely on the database are disabled.

### Recent Projects

Visible when you click **Open**. View the most recent projects you have opened. You can also pin/unpin recent projects.

### Recent Places

Visible when you click **Open.** View the most recent places you have visited. You can pin/unpin recent places.

New

Create a new project in memory that is not yet committed to the database from a template in the Available Templates section.

### Available Templates

Visible when you click **New**. Start a new project from one of these templates.

Save & Send

Choose a file format to save/send to other users.

Save As to File

Save a project as a file with a new name in the default format.

### Save

Visible when you click **Save and Send.**

Developer Project

Save the project to its original location--either a portfolio or a file.

Developer File

Save the project as file in the default format.

Other File Formats

Save the project as a file with a new name in the other formats.

Version 2.06 File

Save the project in a format that can be read by any version higher than 2.06.

### Send

Visible when you click **Save and Send.** Choose to email project file or report group.

Email Project

Send a copy of the project in an email as an attachment.

Create PDF and Email Report

Send the selected report group in PDF format in an email message as an attachment.

## Portfolios and Projects

Navigation: File tab>Projects.

## Purpose

The Projects screen allows you to create/modify **portfolios** and **projects**.

|  |  |
| --- | --- |
| [Open Portfolio](#_bookmark25) [Add Portfolio](#_bookmark27) [Delete Portfolio](#_bookmark32) [Copy Portfolio](#_bookmark29) [Portfolio Security](#_bookmark34) [Refresh Portfolio](#_bookmark36) [Edit Portfolio](#_bookmark38) Import Portfolio [Export Portfolio](#_bookmark41) [Portfolios Grid](#_bookmark23) | [Open Project](#_bookmark26) [Add Project](#_bookmark28) [Delete Project](#_bookmark33) [Copy Project](#_bookmark30) [Move Project](#_bookmark31) [Project Security](#_bookmark35) [Project Settings](#_bookmark39) Import Project [Export Project](#_bookmark42)  [Refresh Project](#_bookmark37) [Projects Grid](#_bookmark24) |

Portfolios Grid

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
| Name | Displays the name of the portfolio. |  |
| Owner | Displays the name of the creator of the portfolio. |  |
| Reference | Displays the unique reference. |  |
| Mapping | Displays the Mapping selected. | Column only displays for Snapshot licenced users. See also, Cost Codes |
| Source Cost Code Set | Displays the Source Cost Code Set selected. | Column only displays for Snapshot licenced users. See also, Cost Codes |
| Worksheet Cost Code Set | Displays the Worksheet Cost Code Set selected. | See also, Cost Codes |

Projects Grid

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
| Name | Displays the name of the project. | See also, Project Details. |
| Owner | Displays the name of the creator of the project. |  |
| Job Number | Displays the job number. | See also, Project Details. |
| Version Reference | Displays the version reference. | See also, Project Details. |
| Start Date | Displays the Project Start Date of the project. |  |
| Saved Date | Displays the date and time | This is system generated information. |

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
|  | of the last save of the project. |  |
| Saved Version | Displays the version the project was last saved in. | This is system generated information. |
| Save KPIs | Displays the setting for Save KPIs. | * **Blue Box** - Defined on the System Settings window. * **Check Mark** - KPI results save to the database. * **Empty Box** - KPI results do not save to database. |
| Developer File Name | Displays the Developer File Name. | * Projects initially opened/imported/created from a **flat file (.wcfx)** display the original name and extension. * Projects initially opened/imported/created from a **database file (.adx)** display the template file name. |

Portfolios and Projects Buttons

|  |  |
| --- | --- |
| **Portfolios** | **Projects** |
| Open Portfolio  Click a **portfolio** by name. Result: Projects window displays the projects contained in that portfolio. | Open Project  Double click on a **project** by name. Result: Projects window displays the projects in that portfolio.  Option: **Right click>Open Project**. |
| Add Portfolio Procedure:   1. Click **Projects>Add Portfolio.** 2. Option: Right click in the Portfolio area and choose **Add Portfolio**. 3. Result: Add Portfolio Window appears. 4. Type a **name.** 5. Type a **reference.** Options: For Snapshot users, select a **Mapping** and **Source Cost Code Set**. For Non-Snapshot users, select a **Worksheet Cost Code Set** 6. Click **Add**. 7. Result: The new portfolio displays. | Add Project Procedure:   1. Click **Add Project.** 2. Option: Right click and choose   **Add Project**.   1. Click **Default.ptl**. 2. Result: A new project opens to the Project tab. |
| Copy Portfolio Procedure:   1. Select a portfolio by name. 2. Click **Copy Portfolio.** Option: Right click in the Portfolio area and choose **Copy** P**ortfolio.** 3. Result: The duplicated portfolio displays. | Copy Project Procedure:   1. Select a **project** by name. 2. Click **Copy Project.**   Option: Right click in the Project area and choose **Copy Project**.  Result: The Copy Project popup appears.   1. Choose Copy project to an existing portfolio or Copy project to a new portfolio and fill out all information. 2. Click **OK**.   Result: The duplicate project appears in the Project Name  column for selection. You will |

|  |  |
| --- | --- |
|  | need to open the project to edit its details.  Move Project Procedure:   1. Select a **project** by name. 2. Click **Move Project**.   Option: Right click and select  **Move Project**.  Result: The Move Project popup appears.   1. Choose Move project to an existing portfolio or Move project to a new portfolio and fill out all information. 2. Click **OK**. |
| Delete Portfolio Procedure:   1. Select a **portfolio** by name. 2. Click **Delete Portfolio.** 3. Option: Right click in the Portfolio area and choose **Delete Portfolio**. 4. **Warning:** Create a backup copy of the portfolio before deleting it. Deleting a portfolio will permanently delete all portfolio and property data associated with it.   Result: The deleted portfolio is removed. | Delete Project Procedure:   1. Select a **project** by name. 2. Click Delete Project**.** 3. Option: Right click in the Project area and choose **Delete Project**. 4. **Warning:** Create a backup copy of the portfolio before deleting it. Deleting a project will permanently delete all project and property data associated with it.   Result: The deleted project is removed. |
| Portfolio Security  Administrators can set permissions for Users or User Groups that apply to a specific portfolio. Any permissions granted at this level will override the system level permissions.  Procedure:   1. Select a **portfolio** by name. 2. Click **Portfolio Security**. 3. Result: Permissions Pop-Up appears. 4. Select **users/groups** by name. | Project Security  Administrators can set permissions for Users or User Groups that apply to a specific project within a portfolio. Any permissions granted at this level will override the system level and portfolio level permissions.  Procedure:   1. Select a **project** by name. 2. Click **Project Security**. 3. Result: Permissions popup appears. 4. Select **users/groups** by name. 5. Click the **expander** next to the Permission. |

|  |  |
| --- | --- |
| 1. Click the **expander** next to the Permission.   Result: A list of permissions displays.   1. Click the **checkbox** to the left of the permission to assign/deny it.   Note: Blue box means the permission is assigned.  Empty white box means the permission is denied.   1. Click **OK**. 2. Result: Portfolio permissions are set.   See Also  System Permissions | Result: A list of permissions displays.   1. Click the **checkbox** to the left of the permission to assign/deny it.   Note: Blue box means the permission is assigned. Empty white box means the permission is denied.   1. Click **OK**. 2. Result: Portfolio permissions are set.   See Also  System Permissions |
| Refresh Portfolio Procedure:  Click **Refresh Portfolio.**  Result: System refreshes the list of portfolios. | Refresh Project Procedure:  Click **Refresh All Projects.** Result: System refreshes the list of projects. |
| Edit Portfolio Procedure:   1. Select a **portfolio**. 2. Right click and select **Edit Portfolio.**   Result: The Edit Portfolio popup appears.   1. Edit the **Name** and   **Reference**.  Options: For Snapshot users, select a **Mapping** and **Source Cost Code Set**. For Non-Snapshot users, select a **Worksheet Cost Code Set**.  Note: If a project has been attached to the portfolio, these settings cannot be changed.   1. Click **OK**.   Result: The portfolio displays with the updated  information. | Edit Project Settings Procedure:   1. Right click on a project and select **Project Settings**. Result: The Project Settings popup appears. 2. Choose from:    * Use System Setting for saving/removing Key Performance Indicators    * Save reporting Key Performance Indicators when the project is saved    * Remove exiting Key Performance Indicators when the project is saved 3. Click **OK**.   Note: White checkbox means the setting is turned off. Blue  checkbox means the system setting is turned on. |
| Import Portfolio | Import Project |

|  |  |
| --- | --- |
| Import Portfolio | Import Project |
| Export Portfolio Procedure:   1. Right-click in the Portfolio area and select Export Portfolio**.** 2. Result: Export Destination Pop-up appears. 3. Type a **file name** or click the ellipsis. 4. Result: Windows File Name Pop-Up appears. 5. Option: Change the folder location. 6. Type a **file name**. 7. Note: The **Save as Type** defaults to ARGUS Developer Files (\*.ADX). 8. Click **Next.** 9. Result: Successful Export message appears. 10. Click **Finish**. See Also   Importing/Exporting Data | Export Project  See Importing/Exporting Data |
| Refresh Report Data Procedure:   1. Select a **portfolio**. 2. Right click in the Portfolios grid area. 3. Select **Refresh Report Data**.   Result: The Refresh Report Data popup appears.   1. Click **Yes**. 2. System refreshes data for multiple projects. | Refresh Report Data Procedure:   1. Select a **project**. 2. Right click in the Projects grid area. 3. Select **Refresh Report Data**. Result: The Refresh Report Data popup appears. 4. Click **Yes**. 5. System refreshes data for selected project. |
| Clear Sort Order Procedure:   1. Right click in the Portfolios area. 2. Select **Clear Sort Order.**   Result: Restores the default sort order. | Clear Sort Order Procedure:   1. Right click in the Projects area. 2. Select **Clear Sort Order.** Result: Restores the default sort order. |

## Import/Export

## Importing/Exporting Data

Navigate to File tab>Import/Export Click one of the following:

* Import Data
* Export Data
* Clear Invoice Data

### Overview

You can import/export data in several ways. Some of these methods allow you to exchange information with other Developer installations or with other ARGUS products (such as ARGUS Valuation Capitalisation).

Import Data

* [**Import Developer File:**](#_bookmark44)Allows you to import project data from Developer projects on your file system.
* [**Import Portfolio, Project or Cost Code Set:**](#_bookmark46)Allows you to import a portfolio from a file exported from another installation of ARGUS Developer v7.0+.
* **Import Invoice Data:** Allows you to regularly update all your actuals from an external file or direct link to the external source.
* [**Import Invoices from External Data Source:**](#_bookmark49)Allows you to create the link to import data directly from an external source.
* [**Import Area Data:**](#_bookmark51)Allows you to import area, rent and sales data into the area schedule definition editors.

Export Data

* [**Export Data Wizard:**](#_bookmark53)Allows you to export selected items directly to an Excel spreadsheet or into other file formats that can be imported into another Developer installation or into other (third-party) applications including ARGUS Valuation-Capitalisation.
* [**Export Template:**](#_bookmark56)Allows you to export a project as an ARGUS Developer template.
* [**Export in Version XX.X Format**](#_bookmark57)**s:** Allows you to export a project so that it can be later opened in the indicated version. For example, 6.5 format allows the file to be opened in version 6.5
* [**Export to ARGUS Enterprise**](#_bookmark55): Allows you to export a project so that it can be later opened in ARGUS Enterprise.

Clear Invoice Data

* [**Clear Invoice Data:**](#_bookmark58)Allows you to delete all data for the current actuals period.

**Note:** If you require further help and information regarding the structuring of .xml files or direct connection to a database, you should contact your ARGUS sales representative or ARGUS technical support for details of our consultancy services.

The import/export methods are built-in wizards and are capable of transferring large amounts of data.

Importing

You can import portfolio and project data from existing Developer files:

* .wcfx (transferring project data between installations of Developer)
* .adx (transferring portfolio data)
* .wcf
* .xml

Exporting

You can export portfolio, project, project & structured finance cash flows, appraisal summary, and area schedule data in file formats:

* .wcfx: Single project.
* .adx: Portfolio containing multiple projects including cost code data.
* .dvl: ARGUS Valuation Capitalisation.
* .csv: Comma separated values.

**Note:** .xml can also be read by external programs such as Excel.

**Note:** For ARGUS Developer v3+, you can export cash flows in the Developer .xml format. You can also add the imported data to an existing portfolio or use it to create a new portfolio.

## Import Developer File

The import formats that are currently supported by Developer are .wcfx, .wcf, (this is a special .xml file that can be used for transferring portfolio and project data between installations of Developer) and .xml files. Note: .xml can also be read by external programs such as Excel. Also, if you have ARGUS Developer 3 (or later), you will be able to export cash flows in the Developer .xml format. When the data is imported, you will have option to add to an existing portfolio or create a new portfolio.

#### Navigate to File tab>Import/Export>Import Data>Import Existing Developer Projects.

Result: File Browser appears.

1. Choose the file type in the pick list.
2. Browse for the file and click **Open**.
3. Click **Add to an existing portfolio** to add the imported project to the selected portfolio.

Option: Click **Create a new portfolio and add the project:** to create a new portfolio and add imported project to it.

1. Click **Next**.

Result: Select Portfolio Pop-Up appears.

1. Select the portfolio.
2. Click **Import**.

Result: Import Data Status Pop-Up appears.

1. Confirm your project has imported successfully.
2. Click **Close** to close the wizard.

## Create a new portfolio and add project

1. Click **Create a new portfolio and add the project**, then click **Next** to continue.
2. Add a name and unique reference ID for your new portfolio. If you have already created a cost code mapping, you can select one in pick list of the **Mapping** field.
3. Click **Import** to add the project to the newly created portfolio.
4. Confirm your project has imported successfully, then click **Close** to complete this process.

## Import Portfolio, Project or Cost Code Set

#### Navigate to File tab>Import/Export>Import Data>Import Developer Portfolio, Project or Cost Code Set.

Result: Import Parameter Pop-Up appears.

* 1. Click ellipsis to browse to the portfolio file (.adx).
  2. Click **Next**.

Result: Import Data Summary Pop-Up appears.

* 1. Review the import.
  2. Click **Next**.

Result: Import Portfolio Pop-Up appears.

* 1. Select an import method:
     + **Create a new portfolio called:** Enter a name for the new portfolio.
     + **Update an existing portfolio:** Select the portfolio you want to update.
  2. Click **Next**.

Result: Verify Update Pop-Up appears. This displays information about the contents to be imported.

* 1. Click **Next**.

Result: Successful import message appears.

* 1. Click **Finish** to close the wizard.

## Import Invoice Data

To ensure your project is up to date, you must import actual transaction data from your General Ledger or other financial planning software. Developer provides a dedicated wizard that will assist in this process. You can import data as an .xml file or a .csv file. Alternatively, you can connect directly to a database.

1. Navigate to **File tab>Import/Export>Import Data>Import Invoice Data**. Result: to the Update project Source Data Pop-Up appears.

Option: You can elect not to show this page during subsequent Import Actuals Data updates by un-checking **Show this page in future**.

1. Click **Next**.

Result: Select Data Source Pop-Up appears.

1. Click the data source type:
   * **Project Source Data XML Import:** Imports from a standard ARGUS Developer XML project source data file.
   * **Project Source Data CSV Import:** Imports from a file of comma-separated project source data values.
   * **Project Source Database Connection:** Imports from a project source database connection.
2. Click **Next**.

Result: Import Options Pop-Up appears.

1. Click ellipsis in **File Name** to browse for csv or .xml file.
2. Click **Next**.

Result: File Browser appears.

1. Locate and select the file.
2. Click **Open** .
3. Confirm the data sources.
4. Click **Next**.

Result: Target Projects popup appears.

1. Select the project(s) to update.

Note: You can select one or multiple versions of the same project if versions have been created.

Result: Invoice Allocation and Correction popup appears.

1. Review allocated/unallocated phase reference numbers.

Option: Click the toolbar>filter to display only unallocated phase reference numbers.

1. Hover over any Warnings for unallocated phase reference numbers. Result: Displays message **Phase reference doesn't exist in any phase**. Option: Click **Ribbon>Align Phase References**.

Result: The Assign Phase References popup appears.

Note: If there is an issue with the phase reference number, for example it is an error in the source data, you must fixe the error in the source file and re-import the invoice. Alternatively, you can go to Project>Timescale>Phase Reference and type the correct the phase reference number.

1. Type any missing reference numbers in the Reference column and click **OK**. Result: Invoice is not allocated in the State column.
2. Click **Next**.

Result: Import Successful message appears.

1. Click **Finish** to complete this process. If Data Update Unsuccessful

If the data update was unsuccessful, you will see the following **Error** message:

1. Click **Display Log** to identify the data error.
2. Click **Save Log** to save the log. You must return to the source data and correct.
3. Click **Cancel** to close the wizard.

## External Data Sources

**Warning:** For use by advanced database users and administrators only. Please contact your ARGUS Software representative or ARGUS technical support if you require consultancy services for correct implementation.

In addition to importing from xml and csv files, ARGUS Developer also allows source data to be imported from:

* + SQL Server
  + Oracle
  + ODBC
  + OLEDB

Before You Begin

Before importing data from an external data source, you must first create:

* + Import configuration: Defines the source of the data and any options that need to be applied during the import.

Note: Import Configurations are loaded, created, and managed in the Extension Configuration Manager.

## Import Invoice from External Data Source

#### Navigate to File tab>Import/Export>Import Data>Import Invoice from External Data Source.

Result: Extension Configuration Manager appears. Configuration Manager

The Configuration Manager allows you to:

* + Load
  + Edit
  + Create import/export extension profiles.

**Load From File** is useful if ARGUS Software’s technical support or consultancy services sends you new import/export extensions. In this case, load the .axc file, and a new extension will be added to your system.

1. Click Create Configuration.

#### Click Project Source Data Direct Data Import.

Result: Creates a blank configuration and opens the Configuration Wizard.

1. Type/select connection details.

Connection Type

Select a connection type to fetch the external data:

* + OLEDB (Excel or Access)
  + ODBC
  + SQL Server
  + Oracle
  + Oracle ODP

Connection String

1. Enter the connection string for the external data source. Examples of connection strings:

Microsoft Excel 2007 (and later) Provider=Microsoft.ACE.OLEDB.12.0; Data

Source=c:\myFolder\myExcel2007file.xlsx; ExtendedProperties="Excel 12.0 Xml; HDR=YES";

Microsoft Access 2007-2013 (Standard Security) Provider=Microsoft.ACE.OLEDB.12.0; Data Source=C:\myFolder\myAccess2007file.accdb; Persist Security Info=False; MySQLConnection (.NET)

Data Source=myServerAddress;Database=myDataBase;User ID=myUsername;Password=myPassword;Command Logging=false;

1. Click **Test Connection**.
2. Click **Next** .

Result: Export Data Pop-Up appears.

## Data

1. Select a method for fetching the data from the data source.
2. **Single Table or Query:** Enter name of the single table or query.
3. **Custom Query:** Enter custom query.

Note: Please refer to the documentation provided with the third-party software.

1. Click **Next**.

Option: Click **Previous** to make changes on a previous screen.

1. Select a data source.
2. Click **Test**.
3. Click **Next**.
4. Click **Finish**.
5. Type a name for the new configuration.
6. Click **Close**. Technical Notes
   * Configurations are stored in the ‘ExtensionConfigurations’ sub-folder in the

application folder.

* + Each configuration is stored as a separate XML file that defines the common properties of the configuration (e.g. description, author, extension type etc.) and the extension-specific data that comprises the configuration.
  + Configurations are not inherently bound to a single machine and may be freely copied between machines either by direct file copying or by using the load/save facility in the Configuration Manager (the load / save functionality simply wraps file copy operations for the user’s convenience).
  + Configurations may relate to entities on one machine that are not present on another (ODBC connection be freely copied); it may then fail when used.
  + At present, configurations are only supported by the Source Data Direct Database Import extension; however, other extensions may be provided in the future which support configurations. In the event of such extensions being made available, you can add the relevant libraries to the extensions folder, and the application will integrate them into the product.

## Import Area Data

You can import basic area schedule information such as sales or rental values into a new project or update an existing project by using a .txt file.

1. Open an existing project.

Option: Add a new project from the Project Browser.

1. Navigate to **File tab>Import/Export>Import Data>I**mport Area Data. Result: Import Data popup appears.
2. Click **Next**.

Result: Import Data popup appears.

1. Click **Import File Name** ellipsis to browse and select the .txt file.
2. Select an option for **Update existing definitions with new data**.

Option: Click **Never overwrite existing records** to import as a new record and not replace any existing fields**.**

Option: Click **Overwrite record if match in Heading** to replace all records with matching headings.

Option: Click **Overwrite record if match on Unit Number** to replace all records with matching unit numbers.

1. You can select/deselect the **Ask before replacing each record** checkbox. When selected, this option asks you before replacing each record so that you can choose which records to replace during the import process.
2. Click **Finish** to close the wizard.

## Exporting Data

You can export ARGUS Developer data to a range of applications. The program remembers your last file save location:

* + Microsoft Excel
  + ARGUS Valuation – Capitalisation
  + ARGUS Enterprise
  + Applications that accept CSV files Supported Export Formats:
  + wcfx
  + adx
  + wcf
  + xml
  + aeix

**Note:** .xml can also be read by external programs such as Excel.

**Note:** If you have ARGUS Developer v3+, you can export cash flows in the Developer

.xml format. When the data is imported, you can add them to an existing portfolio or create a new portfolio.

Exporting to Other Products

If you want to use data in ARGUS Developer in another software package, you can use the Export Wizard to:

* + Combine cash flow and floor space data to perform analysis on a property.
  + Use development costs only to model the refurbishment of a property in ARGUS Valuation – Capitalisation.
  + Create a cost file that can be imported into ARGUS Enterprise.

### Export Data Wizard

1. Navigate to **File tab>Import/Export>Export Data>Export Data Wizard**. Result: File Browser appears.
2. Select **What action do you want to perform?** and the Description field displays the action selected.
3. Click **Finish**.

Option: If **Finish** is unavailable, click **Next** to select file format.

1. Select **Create a file of type**.
2. Click **Finish**.
3. Wait while data is exporting.

Export to Microsoft Excel

ARGUS Developer works closely with Excel and defines a set of templates that can be used for presentation and analysis of cash flows and appraisal summaries. When you export to Excel, ARGUS Developer opens Excel and pushes the data into one of several pre-defined templates according to the type of report you want to create.

A simple report contains:

* + Detailed cash flow for each project item
  + VAT value row
  + Interest value row
  + Column totals

When the report is pushed to Excel, ARGUS Developer provides additional formatting for the row and column headings.

To export the cash flow data to Excel

1. Navigate to **File tab>Import/Export>Export Data**.

Result: What action do you want to perform Pop-Up appears.

1. Select **Export Cash Flow**.
2. Click **Next**.
3. Click **Export to Microsoft Excel**.
4. Click **Next**.
5. Select from the following destination options:
   * **Create a simple Cash Flow Report:** Enter the cash flow cycle required (in months) and specify whether hidden row values and group labels are to be exported.

Option: To reduce the number of rows of data in the exported cash flow, uncheck both these options.

* + **Create a new Cash Flow Analysis Report:** Click a template from the list or use the browser to view another drive or directory.

Option: If your project uses Structured Finance, you can export individual cash flow lines that all have the same category (e.g. Construction).

* + **Update an existing Cash Flow Analysis Report:** Click a report from the list or use the browser to view another drive or directory.
  + **Create a Project Data and Finance Cash Flow Workbook**: Click to export project and finance data from the project currently opened. This export is available only for projects using Structured Finance.

1. Click **Finish** to export.

See Also: Enhanced Excel Analytics

Export to ARGUS Enterprise

The export to ARGUS Enterprise produces an .aeix file that contains all the project cost data.

1. Go to File tab>Import/Export>Import Data>Export Data>Export Data>Export to ARGUS Enterprise.

Result: The Export to ARGUS Enterprise popup appears.

1. Select a **detail level for development cost export** option.

Option: Click **Total Development Costs** to sum all the development costs. Option: Click **Grouped Development Costs** to group the development costs. Option: Click **Individual Line Items** to include/exclude specific line item costs. Option: Click **Separate Land Cost** to separate out the land costs. This option is only available if you selected the Total Development Costs option.

1. Click **OK**.
2. Navigate to a file location to save the file and click **Save**. Note: Costs are mapped as capital expenses in ARGUS Enterprise.

Export to ARGUS Valuation - Capitalisation

The export to ARGUS Valuation - Capitalisation produces a .dvl file that contains all the information required to generate a development cash flow that integrates with the investment cash flow. The ARGUS Valuation - Capitalisation cash flow calculates a single purchase price and one capitalisation value for each tenant. Since ARGUS Developer also calculates these values for each project, you are given the option to suppress these values to avoid double-counting.

After the export has been completed, open ARGUS Valuation - Capitalisation and import the export data file (.dvl) to the relevant property.

To export the cash flow to ARGUS Valuation-Capitalisation

1. Navigate to **File tab>Import/Export>Export Data**.
2. Select Export Cash Flow.
3. Click **Next**.

#### Click Export to ARGUS Valuation – Capitalisation.

1. Click **Next**.
2. Click a method upon which to base the exported cash flow:
   * Purchase Price and Fees
   * Capitalisation and Fees
3. Click **Finish** to close the export wizard.

Export to Comma Separated Values file

ARGUS Developer data can be exported to Comma Separated Value files (.CSV), which are opened in:

* + Word processors
  + Spreadsheets
  + Databases
  + Other proprietary packages.

To export the cash flow to CSV format

1. Navigate to **File tab>Import/Export Data>Export Data**
2. Select Export Cash Flow.
3. Click **Next.**
4. Select Export to Comma Separated Values.
5. Click **Next**.
6. Select the cash flow cycle (monthly, quarterly etc.) in the pick list.
7. Click **Finish** to close the export wizard.

Export Templates

If your models always use the same items, the following will facilitate building future models:

* + Assumptions
  + Costs Codes
  + Definitions (construction costs, architects fees, sales, rent, etc) To export the project as a Developer Template

1. Navigate to **File tab>Import/Export> Export Data**.

Result: Save As Pop-Up appears.

1. Type a filename.

Note: By default, the **Save as Type** is set to **Developer Template** (\*.ptlx).

1. Click **Save** to save the template file into the installation sub-folder.

Note: The folder location for the templates can be amended by selecting **Control Panel>Options>Folder Locations**.

1. The template will be available after ARGUS Developer is closed/re-opened and will be displayed in a pick list when selecting **Add a Project** in the Project browser.

Export in Format

Export as file format that can be subsequently imported into your current version.

#### Navigate to File tab> Import/Export>Export Data>Export in Version XX.X Format.

Result: Save As Pop-Up appears.

1. Browse to a location.
2. Type a file name.
3. Select the **Save As Type** file format.
4. Click **Save**.

**Note:** Information that relates to new functions only found in ARGUS Developer v7.0 or higher is not imported into version 6.5.

## Clear Invoice Data

This function permanently deletes transactions imported and any allocations made. It can only be applied if the period is open.

Warning: You may require supervisory access rights to this function. Contact your system administrator.

Warning: If you apply Clear Invoice Data, your actual transactions data will need to be re-imported.

1. Navigate to **File tab>Import/Export> Clear Invoice Data**. Result: Clear Invoice Data popup appears.
2. Select a method for clearing actuals data:
   * Clear all invoices and allocations from all open periods
   * Clear unallocated invoices from all periods Option: To stop this process, click **Cancel**.

**Note:** The Data Checker no longer warns that invoices are unallocated.

## Cost Codes

Navigation: **File tab>Cost Codes.**

Before you can import actual transactions into your model, you must first create the primary system data component (cost codes) that will enable ARGUS Developer to work with a variety of data sources provided from external systems. Cost code(s) are applicable system wide (if you have a licence for the Snapshot module) and once created can be used many times or create a completely different set. These items should be created first and essentially, this is a one off operation which would form part of the implementation of the software.

### Budget Snapshot Licence Parameters

Budget Snapshot users can access the full functionality for the Cost Codes screen.

Non-Snapshot Parameters

Users without the Budget Snapshot module can access the following on the Cost Codes screen:

* + Add Cost Code Set
  + Copy Cost Code Set
  + Import Cost Code Set
  + Export Cost Code Set
  + Review Worksheet Cost Code Set

### Overview

You can import and apply cost codes in several ways in ARGUS Developer. You may choose from the following commands:

* + [**Cost Code Format:**](#_bookmark60)Allows you to define a cost code format.
  + [**Cost Code Sets**](#_bookmark66)[**:**](#_bookmark60)Allows you to define sets of cost code items.
  + [**Cost Code Mapping**](#_bookmark67)[**:**](#_bookmark60)Allows you to map cost codes to external source.

## Defining Cost Code Format

Navigate to **File tab**>**Cost Codes>Cost Code Format**.

The Cost Code Formats section allows you to define the cost code structures that you can apply to cost codes. These cost code structures act as input masks for cost codes, and you can define formats for use with both internal and external cost code data.

**Note:** Creating Cost Code Formats is one of the first tasks you will have to perform when you start setting up Developer.

You must define Cost Code Formats for all the types of cost codes you will be using, and you must do this before you create records for Cost Code Sets, Cost Code Items and Cost Code Mappings.

**Note:** You must create all these types of records before you begin a data import from an external source.

It is highly recommended that if you are importing cost code data that uses the same format as your internal cost codes, you may only need to create one Cost Code Format that you can use for both external and internal data.

If, however, you are importing cost code data from a range of different systems using different cost code structures, you may need to create several Cost Code Formats to cope with the different inputs. Standard filtering options apply.

Right-click in the Cost Code Format area, to display the options to Add, Copy or Delete a format.

## Add Format

Click Add Format to create the new record.

Add New Cost Code Sets window

The Cost Code Format record contains entry fields and other controls that allow you to define a cost code format.

Name

Enter the name of the cost code format.

No. of Lines

Enter or select the number of lines for the cost code format. Click the **Add** button.

### Cost Code Format

The Cost Code Format grid will open on the right side of the screen.

Name

Enter the name of the cost code format.

Levels

The number of levels will be used to define the levels within a cost code. Specify up to four levels in the drop-down list. You may choose from the following options:

* + 1 Level
  + 2 Levels
  + 3 Levels
  + 4 Levels

**Note:** If you specify fewer than four levels, the higher numbered **Description** and

**Length** fields are not available.

Example

A three-level cost code would appear as:

Each level is separated from the other levels by a non-numeric separator character, which you can enter in the [**Separator**](#_bookmark63)field.

Pad 0’s

Use this drop-down list to specify whether or not you wish to use zeroes to pad the cost code. You may choose from the following options:

* + **Yes:** If you select Yes, zeroes will be added in front of numbers to make them fit the structure of the cost code.
  + **No:** If you select this option, zeroes will not be added in front of numbers. Example - Yes for Pad 0's

If you specified that the first level in the cost code should have three digits, and you enter a cost code containing a number (at that level) that has only a single digit, two zeroes will be added in front to make it three digits.

Level 1 Description

Enter a description as an identifier for level one.

Level 1 Length

Enter the number of characters for level one. The maximum limit is twenty characters.

Level 2 Description

Enter a description as an identifier for level two.

Level 2 Length

Enter the number of characters for level two. The maximum limit is twenty characters.

Level 3 Description

Enter a description as an identifier for level four.

Level 3 Length

Enter the number of characters for level three. The maximum limit is twenty characters.

Level 4 Description

Enter a description as an identifier for level four.

Level 4 Length

Enter the number of characters for level four. The maximum limit is twenty characters.

Separator

Scroll to the right in the grid. Enter a single non-numeric or non-alphabetic character to separate levels. For example, you can enter a hyphen (-) or a slash (/). Hyphen is the default character.

Variable Length

Specify whether or not to apply a variable length to the final level. The default length is twenty. You may choose from the following options:

* + **Yes:** If you select this option, the system assigns the final level a variable length.
  + **No:** If you select this option, the system does not assign a variable length. Sort Order

Enter a number that will be used a numerical identifier, allowing you to sort the record in the list. You can edit this number later if needed. If you create a new record, this number will be automatically incremented from the previous highest number.

Click the **Add** button to apply the new cost code set.

## Copy Format

Right click on the cost code format you want to duplicate, and select Copy Format.

## Delete Format

Right click on the cost code format you want to delete, and select Delete Format. When you are ready to delete the cost code, click the **Yes** button.

## Cost Code Sets

Navigate to **File tab**>**Cost Codes>Cost Codes Sets**.

Define sets of cost codes to be used for the conversion of data from an external financial system (such as your general ledger or accounting software) into a cost code data structure used in Developer.

You can define separate sets for external sources and internal use.

### Defining Cost Code Sets

Cost Code Sets are defined in two major layers, and each of these layers has a separate section:

* + **Cost Code Sets:** This top layer is where you define a name and specify a cost code structure that is used by the Cost Code Items belonging to the set.
  + **Cost Code Items:** This lower layer within the Cost Code Set is where you define each cost, revenue, and finance item. This is also where you specify where each item appears within the structure of the Budget Cash Flow.

Each of these layers has a separate section. Cost Code Sets Area

The Cost Code Sets area allows you to define sets of cost codes that can be used for the conversion of data from an external financial system (such as your general ledger or accounting software) into a cost code data structure. You can define separate sets for external sources and internal use. You can expand/collapse these lines by clicking on the plus/minus sign to the left of the grid. Standard filtering options apply.

Here, you can:

* + Create new cost code sets.
  + Enter a new name for each cost code set record.
  + Specify a cost code format that is used by all cost code items in the cost code set.

Name

1. Type a name for the cost code set.

Cost Code Format

1. Select a cost code format to be applied to all cost code items created for this cost code set. For further information, see **Cost Code Formats.**

Type

1. Select whether the cost code set will be used for:
   * **Source** data (imported from another system)
   * **Worksheet** data (cost code items shown in the cash flow)

In Use

Displays a green tick if the cost code set is currently in use by a Cost Code Mapping (also used by a portfolio).

1. Right-click and select Add Set, Copy Set, Delete Set, or Export Set. Warning: While the cost code set is in use, you cannot delete it.

**Note:** After you enter these details, proceed to Cost Code Set Items to define cost code items.

Cost Code Items Area

Right-click in the Cost Code Items area. Choose from:

* + Add Cost Code
  + Copy Cost Code
  + Delete Cost Code

Warning(s)

This field will display a warning message if there is an error in the record. For instance, a record missing a cost code will display a warning message, "The cost code cannot be blank."

Cost Code

Enter a cost code. Select the format in the Cost Code Set window above.

Description

Enter a name for the cost code item. The name will be used as the description when the cost code item is displayed in the worksheet.

Type

Cost code structures include header and detail accounts. You can specify the type of cost code set item to determine the data displayed in the worksheet. Choose from:

* + **Monetary:** Displays financial amounts for the detail cost codes.
  + **Total:** Displays as a header account that summarises the related detail accounts. For example, Land Acquisition summarises all the land acquisition costs.
  + **Units:** Displays a simple number for the account.
  + **Contingency Fund:** Allows you to transfer money in and out of the fund. For example, you can pay for unexpected costs that arise when the actual cost of a monetary item is higher than its budgeted cost. You can also transfer over- budgeted cost amounts to the Contingency fund.

Worksheet Section

Displays the section label that the cost code is associated with.

Worksheet Rows

Displays the type or number of rows the cost code is associated with.

Lag (mths)

Click on this field and enter the number of lag months.

Sort Order

Click on this field and enter the sort order number.

## Cost Code Mapping

Navigate to **File tab>Cost Codes>Cost Codes>Cost Code Mapping**. The Cost Code Mappings area has the following sections:

* **Cost Code Mappings list:** The Cost Code Import Mappings list allows you to create records that contain mappings between cost codes in an external (source) system and a set of internal (worksheet) cost codes. In this section, you can add new records and

rename them, and there is an In Use indicator, which tells you if an import mapping is currently being used.

* **External Cost Code Set list:** This section displays all the cost code items you defined for the external cost code set.
* **Mapping Links section:** This section contains controls that allow you to create links between items in the External Cost Code Set list and the Worksheet Cost Code Set list.
* **Worksheet Cost Code Set list:** This section displays all the cost code items you defined for the internal cost code set (for use in the worksheets).

### Creating a Cost Code Import Mapping

Right-click in the Cost Code Mapping section to display the options to Add Mapping, Copy Mapping or Delete Mapping.

Click Add Mapping.

This opens the Add Import Mappings window. Add Importing Mappings window

Name

Enter a new name for the import mapping record.

No. of Lines

Specify the number of records to be included. To create several records, specify a number in the **No. of Lines** field.

Click **Add** button to create the new record.

**Note:** You must define the cost code sets before you get to this stage. See Also

[Cost Code Sets](#_bookmark66)

Navigate to the Cost Code Mapping section at the top of the screen.

### Cost Code Mapping section

Name

Edit the name of the cost code mapping.

Destination Cost Code Set

Select a destination cost code set in the drop-down list. This set will be used for the Cash Flow. The Destination (Worksheet) section on the left is now populated with the cost code items defined in the cost code set.

Source Cost Code Set

Select a source cost code set in the drop-down list. This set will be used for external source data.

Has Mappings

This field indicates whether a cost code set contains mappings from source to worksheet.:

* **Yes:** Indicates the cost code set is mapped from source to destination.
* **No:** Indicates the cost code set is not mapped from source to destination. In Use

This field will display a green check mark if the cost code mapping is currently in use by a portfolio. While the cost code mapping is in use, you cannot delete it.

Cost Code Mapping Sources and Worksheets This grid is comprised of the following sections:

* **Source (External) Cost Code Set list (Left):** This section displays all the cost code Items you defined for the external cost code set.
* **Mapping Links (Middle)**: This section contains controls that allow you to create links between items in the external cost code set list and the worksheet cost code set list.
* **Worksheet Cost Code Set list (Right)**: This section displays all the cost code Items you defined for the internal cost code set (for use worksheets).

Filtering

Click on the filter icon in any column for standard filtering. Alternatively, you can right- click on the column header. You may choose from the following options:

* **Hide All Links:** If you choose this option, the system will hide all links between records in the list.
* **Show All Links:** If you choose this option, the system will display all links between records in the list.
* **Show Selected Links:** If you choose this option, the system will only display the link for the selected record.
* **Show Unconnected:** If you choose this option, the system will display all non- linked records in the list.
* **Show All:** If you choose this option, the system will display all records in the list.
* **Break Link(s):** If you choose this option, the system will unlink all selected records in the list.
* **Select All:** If you choose this option, the system will select all records in the list.

### Creating mapping links

Select the cost code items in both lists that you wish to map to each other.

**Note:** You must first define cost code sets before mapping them. See Also

[Cost Code Sets](#_bookmark66)

Mapping Links section (unlabeled)

Click the **Link Selected Cost Codes** button.

A link arrow indicates the two cost code items are now linked.

Straight Mapping

If you two source and destination lists with similarly-named and numbered items, you can Straight Map one list to the other.

**Note:** This process will remove any links previously defined.

Right-click on the Mapping links section. Select the Straight Map option.

The two lists are now straight mapped.

Removing links

Select the cost codes on both sides of the link.

Click the **Unlink selected external code(s)** button.

The link is now removed.

Changing link options

You can adjust how links are displayed. Right-click the Mapping links section. You may choose from the following options:

* **Arrow Style:** This option allows you to choose a style for the arrow end of the link.
* **Line Style:** This option allows you to choose a style for the line used to depict the link.
* **Line Thickness:** This option allows you to choose a thickness for the line.
* **Line Colour:** This option allows you to choose a colour for the line.
* **Background Colour:** This option allows you to choose a background colour for the Mapping links section.
* **Show Stems:** This option allows you to specify whether or not stems (short, horizontal lines at the base of the arrow) are displayed .
* **Indicate long links:** This option allows you to specify whether or not long links (short downward/upward pointing arrows) are indicated. These indicators show that a cost code item that is being linked to is farther down or up in the other list.

### Copy Mapping

Select the record you want to duplicate in the Cost Code Mapping section. Right-click it and choose Copy Mapping in the pop-up menu.

The new record appears with "Copy of..." in the **Name** field. Enter a new name for this record.

### Delete Mapping

Select the record you want to delete in the Cost Code Mapping section. Right-click it and choose Delete Mapping in the pop-up menu.

The deleted record disappears.

## Exporting a Cost Code Set

Export a cost code set then forward it to another user.

1. Navigate to **File tab>Cost Codes>Cost Code Set.**
2. Right click the cost code set to export.
3. Select Export Set.

Result: Export Destination window appears.

1. Enter a file name.
2. Click ellipsis to change the file location.
3. Click **Next**.
4. Enter a title.

Option: Enter notes.

1. Click **Next**.

Result: Message appears: Your data has been exported.

1. Click **Finish** to close the wizard.

## Help

Navigation: **File tab>Help**.

### Support

There are three methods for assistance with this application:

* + **ARGUS Developer Help:** Click this option to open the ARGUS Developer Help menu. You can also reach the Help menu by pressing F-1 for context sensitive information related to the currently active screen.
  + **Contact Us:** Click this option to launch the ARGUS Customer Support website where you can search the ARGUS Knowledge Base for commonly answered questions or contact an ARGUS Customer Support Representative via chat, web case, or phone. You can also copy/paste the following link into your browser address bar: argus.altusgroup.com/support.
  + **Client Feedback Centre:** Click this option to launch the ARGUS Client Feedback Centre website where you can provide welcome feedback about issues and suggested solutions. You can also copy/paste the following link into your browser address bar: https://argus.altusgroup.com/argus-support/

### Hours of Operation

Hours of operation and phone numbers are listed below by region.

Hours of Operation Americas

* + 7:30am to 6:30pm GMT-6 Monday to Thursday
  + 7:30am to 6:00pm GMT-6 Friday
  + excluding USA public holidays Europe
  + 9:00am to 5:30pm GMT Monday to Friday
  + excluding UK public holidays Middle East/Africa
  + 9:00am to 5:30pm GMT +8 Monday to Friday
  + excluding public holidays Asia/Pacific
  + 9:00am to 5:30pm GMT+8 Monday to Friday
  + excluding Singapore public holidays

By telephone

* + US/Canada: 1 888-MyARGUS(692-7487)
  + Asia/Pacific/Singapore: +65 6411 2288
  + Australia: +612 9262 1332
  + Europe: +44 (0) 20 3551 6700
  + All others please call: +1 713 621 4343

### About

This section provides a quick reference for the Application Number, Build Number, and Database Number. This information is needed when you are ready to upgrade the database or need to reference your database.

### Licensing

This section provides information related to your licence. For questions regarding your licence or to add seats or modules to your licence, contact your ARGUS Account Services representative.

## Control Panel

## Control Panel

Navigation: **File tab>Control Panel**.

The Control Panel in the backstage area manages and administers how users can interact with ARGUS Developer, set up Security protocols and define system settings. It contains the following sections:

* + Developer Database: Allows you to connect and manage other database connections.
  + My Account: Allows you to manage your logon credentials.
  + System Settings: Allows you to modify system settings and general model preferences.
  + Security: Allows you to define who has access to ARGUS Developer.
  + Licence Options: Allows you to select which of your licences to load.
  + Reports and Printing: Allows you to set report layouts and manage printer setups.
  + System Maintenance: Allows you to refresh the report database for the current open project or all projects.

See Also

Developer Database My Account

Options Preferences Database Settings Users

System Permissions User Groups

Logon Settings Report Setup

Refresh Current Project Refresh All Projects Licence Options

**Note:** The Licence Options section only appears if additional licence options are set up by the user.

## Developer Database

Navigation: **File tab>Control Panel>Developer Database**.

## Introduction

Once the ARGUS Developer software is installed, the Configuration Manager will run to allow the Database Administrator to create a connection string(s) to the relevant database(s) where all the data will be held for which the standard user can access. If multiple databases have been connected and configured, they are all displayed in Database Selection drop-down list. On selection, you will be asked to logon to that database.

### Developer Database

Database Selection

Choose a database in the drop-down list. Confirm the correct database selection with your system administrator.

Manage Database

Click the **Manage Database** button to manage existing database connections.

## Change/Manage Files Outside the Database

You can log off from the database and make/manage file changes outside the database. If you log off from the database, the **following functions are not available**:

* + Save to Portfolio
  + Security
  + Users
  + User Groups
  + System Permissions
  + Logon Settings
  + Snapshot module (if you have a licence)
  + Cost Codes
  + Budget Ribbon
  + Budget Reports

**Note:** If you have a Workstation licence, you can work on files when disconnected from the Internet and can connect/disconnect from a locally saved database.

## Users

Navigation: **File tab>Security>Users**.

Define records that specify users and their access authorisation profiles.

## Purpose

This record contains entry fields and other controls that allow you to define an ARGUS Developer user profile.

See Also Permission Rules

### Users

Add New User

1. Click **Users**.

Result: The Users popup appears.

1. Click **Add**.

Result: The User entry popup window appears. Type:

* + Name
  + Description (optional)
  + Password
  + Confirm password

1. Click **Add**.

Result: The new user displays in the Users grid.

1. Select **user(s)** in **Available Groups** (left). Option: Create user groups.
2. Click the **right single** or **double arrow** keys to add or remove the selected or all users to **Member Of** (right).

Option: Click the **left single** or **double arrow keys** to remove the selected or all users from the **Available Groups** (right) to **Member Of** (left).

Option: You can also nest a separate group by clicking the single/double arrow keys.

1. Click **OK**.

Result: The User entry popup disappears.

Option: Click the **Password ellipsis** to change the user password.

See Also

Setting up User Groups Delete User

Note: You cannot delete the Administrator.

1. Select a **user** by name.
2. Click **Delete**.

Result: A delete challenge popup appears.

1. To confirm **deletion**, click **Yes**.

Result: The deleted user is removed from the User list.

## My Account

Navigation: **File tab>Control Panel>My Account**.

## Purpose

The My Account section displays your user profile details and allows you to Logon/Logoff from the software or change your password.

Logon

Click the **Logon** button to open the Logon Details popup. To logoff from the software, click the **Logoff** button.

For Developer 7.5 and lower, the default User Name is “A” and the default Password is “A”. For Developer 7.6 and higher, the default User Name is "admin" and the default Password is "password". This permits access as a System Supervisor. In a multi-user installation, it is important to change the default and set up unique user names, passwords, and group memberships in order to identify each user to the system when logging in.

Security access can also be set at the portfolio level to specify which individual(s) or group(s) will have permission to view, edit, and/or delete the contents of the portfolio.

Single-User Installation

For a single-user installation, you can use the default user name/password “a”, which permits access as a System Supervisor.

Multi-User Installation

For a multi-user installation, you should change the default user name/password and set up unique:

* User names
* Passwords
* Group memberships

See Also

Security System Permissions

**Note:** To enter details in the Security section, you are expected to be a supervisor user. Logon Details

Each user must have a user name and password to logon to the software. The purpose of this is to regulate user access to the database.

Username

Enter your user name.

Password

Enter your user name. Password is case-sensitive and a maximum of 20 characters.

Remember username and password

Choose this option, and the system will auto-populate your username and password the next time you logon.

Logon automatically

Choose this option, and the system will automatically log you on the next time you open the program.

Click the **OK** button to apply your changes. Logoff

Click **Logoff** to log off from the software.

Change Password

Click **Change Password** to open the Change Password window.

Current Password

Enter the current password.

New Password

Enter the new password. Passwords are case sensitive with a max limit of 20 characters.

Confirm Password

Re-enter the new password, exactly as typed in the **New Password** field. Click the **Change Password** button to commit your changes.

Logon when the application starts

Click this checkbox to automatically launch the Logon Details (displays user name and password) popup when you open the application. If you deselect this checkbox, you must manually login each time you open the application.

## General

Navigation: File tab>Control Panel>System Settings>Options.

## Purpose

The General tab contains options for configuring the locale, specifying a template, or whether to display certain optional prompts in the software.

### Localisation

ARGUS Developer can be customised to work with different languages and with different country-specific calculation models and options.

Language

The language in which Developer presents each of its screens can be selected from the following English variants –British English, North American English and Australian English. When you select a language from the selector, every window changes to show the text and terminology in a localised language version.

Region

The Region selection has several uses in the program. Its purpose is to access all the files and templates that make the program specific to the region in which you prepare your development models. Another important function of the **Region** selection is to determine which calculation model will be used for valuing capitalised rent areas. The **Region** field ensures that any model you prepare in your home region can be opened and valued in another region with the same results.

### Template for New Projects

When you first open the program, or start a new project, Developer can use a project template that contains all the setting for the type of project you work with most often.

Select the default new project template in the drop-down list. This is the default template that is opened when you start a new project by clicking **File tab > New > New Default Project** option.

### Show Options

These various options enable certain options to be enabled or disabled in the program.

Show Value Added Tax

If this is checked, then the Value Added Tax screens are enabled and can be opened by clicking on the **VAT Schedule** button. If this option is not checked, then the **VAT Schedule** button is removed from the button bar and the Value Added Tax screens are not available for use.

Show ITZA Rent Editor

To activate the Retail Zoning (Area ITZA) rent screens this option should be checked. ITZA definition screens may then be opened in the Capitalised Rent form by clicking on the **Retail Zoning** (Area ITZA) button or selecting **Zoning** (Area ITZA) from the Area menu. If this is unchecked, then the ITZA options are disabled.

Show Section 106 and Section 278 Costs

To display the definition of Section 106 and Section 278 costs in the Project Definition Summary, this box must be checked. If this option is unchecked, the Section 106 Costs and Section 278 Costs. If this option is checked, you will be able to type a fixed amount or open the Definition Editor for each one on the Definition Screen. For more information on the Definition Editor, see Editing Costs and Receipts.

Show Municipal Costs

To enable the definition of Municipal Costs in the Definition screen, this box must be checked. If this option is unchecked, the **Municipal Costs** field will not be visible in the Definition screen.

Show Purchaser's Costs

To enable the definition of Purchaser's Costs in the Definition screen, this box must be checked. If this option is unchecked, the **Purchaser's Costs** field will not be visible in the Definition screen.

Show Developer's Profit

If this is checked, the **Developer's Profit** option may be selected from the Definition menu in the tool bar. If this is not checked, **Developer's Profit** is disabled.

Show Definition Editors

To show the Definition tab within the main application area, this check box must be checked. To hide the Definition tab, uncheck this box. When you hide the Definition tab, the inputs of floor areas, rates, fees and costs will be entered using the Cash Flow.

Show Expenditure Assumptions

To show the tab for Expenditure in the Defaults and Assumptions window, check this check box. If this check box is unchecked, the Expenditure tab will not be visible.

Show Receipts Assumptions

To show the tab for Receipts in the Defaults and Assumptions window, check this check box. If this check box is unchecked, the Receipts tab will not be visible.

Show Finance Assumptions

To show the tab for Finance in the Defaults and Assumptions window, check this check box. If this check box is unchecked, the Finance tab will not be visible.

Show Calculation Assumptions

To show the tab for Calculations in the Defaults and Assumptions window, check this check box. If this check box is unchecked, the Calculations tab will not be visible.

Show Interest Rate Assumptions

To show the tab for Interest Sets in the Defaults and Assumptions window, check this check box. If this check box is unchecked, the Interest Sets tab will not be visible.

Show Inflation/Growth Assumptions

To show the tab for Inflation/Growth in the Defaults and Assumptions window, check this check box. If this check box is unchecked, the Inflation/Growth tab will not be visible.

Show Residual Assumptions

To show the tab for Residuals in the Defaults and Assumptions window, check this check box. If this check box is unchecked, the Residuals tab will not be visible.

Show Distribution Assumptions

To show the tab for Distributions in the Defaults and Assumptions window, check this check box. If this check box is unchecked, the Distribution tab will not be visible.

Show Leasehold Valuation Option

To enable the valuation of leasehold interests, defined in the Capitalised Rent screen, this option must be checked. If this option is unchecked, then freehold interests only may be valued.

Show Margin Tax Option

To enable the definition of Margin Tax in the Value Added Tax window and Cash Flow screen, this box must be checked. If this option is unchecked, the **Margin Tax** options will not be visible in the Value Added Tax window or Cash Flow screen. This feature is not used in the UK or Europe.

Show Letting/Rent Review Fees options

If this option is checked, users may specify whether Letting/Rent Review fees are calculated on gross MRV or MRV net of deductions. These options may be selected in the Calculation tab of Assumptions for Calculations. If this box is not checked, these options are hidden.

Show Net Development Yield Option

If this option is checked, then you may specify whether the calculation of the Development Yield is to be net of service charge and deductions and net of ground rent. These options may be defined in the Calculation tab of Assumptions for Calculation. If this box is not checked, these options are hidden.

Show Annual % Finance Fees

To enable the editing of the **% pa Amount** field in the Finance Fees tab (in the Structured Finance screen, when you have the Related fee type selected), this box must be checked. If this option is unchecked, the **% pa Amount** field cannot be edited.

See Also

Finance Fees

Show Undrawn Loan Fees

If this option is checked, undrawn loan fees are displayed on the Finance Fees page of the Structured Finance window.

See Also Finance Fees

## Error Reporting

Developer can monitor any unexpected errors that arise when it is running on your computer. To help with detection and resolution to these errors, you can switch on the **Error Reporting** function. When this option is checked, Developer will save some information about the cause of the error to a log file and give you the opportunity to email it to ARGUS Software.

The information in the error report includes a screen shot of the active screen, a trace of the code that was executing when the error occurred and some configuration settings. An edit box is displayed that allows you to enter a short description of what you were doing in the application when the error occurred. Click the **Send Error Report** button to send the report to ARGUS Software.

If you do not want to send the error report to ARGUS Software, click the **Don't Send command** button.

## General Preferences

Navigation: File tab>Control Panel>System Settings>Preferences

The General tab allows you to adjust general preferences and includes the following sections:

* Display
* Formatting
* Timescale and Phasing
* Projects
* Calculation Mode See Also

Cash Flow Preferences Summary Preferences

## General

### Display Options

Show Names on Area Tabs

For the tenant/area name (from the **Heading** field in the Area Schedule) to appear on area tabs in the Area Schedules (capitalised rent and sales), check this option. If this

option is unchecked, then the tabs will display the area number, such as area one, area two and so on. This applies to both capitalised rent and sales entries.

Show Names on Phase Tabs

For the Phase Name to appear on phase tabs, check the **Show Names on Phase Tabs** option. If this check box is cleared, the standard phase numbering will appear on phase tabs, such as Phase 1, Phase 2, and so on.

Show Version in Status Bar

Select this check box if you wish to display the ARGUS Developer version number in the status bar in the bottom of the application workspace.

Show Unit Sales Buttons

For users who do not intend to work on developments involving non-capitalised sales, you may prefer to hide the button that opens the Unit Sales form in the Definition screen. Clear the **Show Unit Sales Buttons** option to hide this option in the Definition screen.

Show Single/Multi Sales Buttons

You may prefer to hide the buttons that open the Single Unit Sales and Multi Unit Sales forms in the Definition screen. Clear the **Show Single/Multi Sales Buttons** option to hide these options in the Definition screen.

Show Data Checker on first Hint, Warning, or Error

Uncheck to disable Data Checker tab from automatically displaying the first time an entry is logged or file is loaded.

Panels are Centred within Workspace

You may choose to show the cost and revenue data entry fields in the centre of the application workspace, or, depending on the layout of your workspace, show them to the right of the workspace. Select the option to show them in the centre of the workspace.

Dialogs Follow Main Window

If this option is checked, windows will automatically open in the main window in which the Developer program is open. If this option is unchecked, the window will open in the window in which it was last closed.

Show Grey Background on Merged Fields

When this option is checked, the fields in the Definition screen for the Merged Phases tab will be displayed with a grey background and black font. If unchecked, the fields are displayed with a white background and grey font.

Number of Definition Columns

Specify the number of columns of cost and revenue data entry fields that you want to see on the Definition tab by increasing or decreasing the number in the spinner box. Either type a number from one to three, or use the spinner arrows to increase or decrease the number.

### Formatting Options

Measurement Units

Specifies whether the floor space definitions are held in **Imperial** (square feet) or **Metric**

(square meters). Changing this option will recalculate all area-based definitions to the

new standard. Floor space, rent, sales, and construction rates are converted. In addition, all step increments in the Sensitivity Analysis function will be converted.

The Site Area will also be converted between the two standards.

**Note:** Switching between the two standards can create small discrepancies due to metric area measurements and monetary values being held to two decimal places.

Land Measured in

Specifies the unit of measurement for the site area. The units are displayed against the **Site Area** field on the Definition page. When you enter a value into the **Site Area** field, the Summary shows the cost of the land per unit of measurement.

### Timescale and Phasing

Add New Phases from Default Template

When adding a new phase, if you wish this new phase to include default information such as time scale, fee relations, growth sets etc, from your default template, check the **Add New Phases from Default Template** option. If this option is unchecked, then ARGUS Developer will create a new blank phase.

Show Timescale and Phasing dialog after Adding or Inserting a Phase

When adding or inserting a new phase by right-clicking on the Phase Tab bar, if you wish to immediately enter time scale and phasing data, check the **Show Timescale and Phasing window on Add or Insert Phase** option. When this option is checked, the Time Scale and Phasing window will be shown after the phase has been added or inserted.

Show All Project Phase Groups / All Phases Finance Structures in Phase Group Selector

When you are working with multiple finance structures, the list of entries in the Phase Group Selector at the bottom left of the Phase Tab bar on the main application window can become very long. When this happens, it can be difficult to navigate through the list to find the entry you want. To reduce the number of entries in the list, and to show only the phase groups that belong with Finance Structure, uncheck the **Show All Project Phase Groups / All Phases Finance Structures in Phase Group Selector** option.

**Note:** You can also right-click on the Phase Tab bar and uncheck the **Show All Project Phase Groups** option to filter out the unwanted entries.

Change the project Phase Group when an editor Phase Group changes

When you are in an editor such as Timescale and Phasing, if you wish to change the phase group and automatically change the phase selected in the main project window, check the **Change the project Phase Group when an editor Phase Group changes** option. If unchecked, then the project displayed in the main project window will not change when you change the phase group in editors such as the Timescale and Phasing.

### Projects

Quickly access this number of Recent Projects

Specify how many projects recently opened that you want to appear on the **Recent Documents** on the **Application Menu** button. The minimum number of projects is one, and the maximum is twenty-five. You can quickly open a project by clicking on its name. Hovering over the name with the mouse will show you which drive and folder it is stored in.

### Calculation Mode

You may choose from the following options:

* **Automatic** (Default)**:** If you select this option, the model will be automatically recalculated when data is changed and confirmed.
* **Manual:** If you select this option, the model must be manually recalculated by clicking the **Calculate Now** button on the Home ribbon. Otherwise, changes will not be applied, and a warning message is displayed in the bottom status bar.

## Database Settings

Navigation: **File tab**>**Control Panel>System Settings>Database Settings**.

## Purpose

Decide if **KPI information is saved to the Database** when a project is saved and control SQL Queries settings.

### Key Performance Indicators

1. Click **Database Settings**.

Result: The Database Settings popup appears.

1. Choose from:
   * Save reporting Key Performance Indicators when a project is saved
   * Remove existing Key Performance Indicators when a project is saved (Default)
2. Click **OK**.

Result: Updates the system setting for saving/removing KPIs to the database.

Note: This setting controls the data pulled for Consolidated KPI reports.

Note: You can apply setting to an individual project rather than entire database via Save KPIs on the Projects Grid.

### SQL Queries

Database Administrators or SQL Experts can adjust the settings for the statements below to help improve performance:

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
| SQL Statement Type | Displays the statement type. |  |
| Timeout(s) | Type a number to increase or decrease timeout setting. | By default, it is set to 15 seconds.  Must enter a value between 0 and 99. |
| SQL Hint | Enable or Disable SQL hints. | By default, it is set to OPTION (MAXDROP 1). |
| Reset | Click Reset to change back to default settings. |  |

## User Groups

Navigation: **File tab>Control Panel>Security>User Groups**.

## Purpose

Define records that specify user groups with similar access authorisations. See Also

Permission Rules

### Groups

This record contains entry fields and controls for defining a user group.

Add Group Before You Begin

Create any User Profiles to add to groups.

Procedure

1. Click **File tab>Control Panel>Security>User Groups**. Result: Groups popup appears.
2. Click **Add** to create a new group.

Option: Select a group and click **Delete** to remove a group.

1. Type a group name.
2. Type a **description**.

Option: Click the **Administrator** checkbox to assign a user to the Admin role.

1. Select **users** in the Available Members list (left).
2. Click the **right single** or **double arrow** keys to add the selected or all users to the Group Members list (right).

Option: Click the **left single** or **double arrow keys** to remove the selected or all users from the Group Members list (right) to the Available Members list (left).

Option: You can also nest a separate group by clicking the single/double arrow keys.

1. Click **OK** to apply changes and close the popup.

Delete Group

1. Select a **group** by name. Result: Popup appears.
2. To confirm **deletion**, click **Yes**.

Result: The deleted group is removed from the User Groups list.

## System Permissions

Navigation: **File tab>Control Panel>Security>System Permissions**.

## Purpose

Administrator can set permissions for users or user groups across all portfolios and projects.

[Assign Permissions to Users/Groups](#_bookmark90) [Permission Rules](#_bookmark91)

### System Permissions

Assign Permissions to Users/Groups

#### Click File tab>Control Panel>Security>System Permissions.

1. Select a user or group.

Option: Add a new user or user group.

1. Click on a **Permission +** expander. Result: Permission line items display.

Option: Click **Expand All** to show all the Permission line items.

1. Click the box next to each **Permission** line item:
   * **Checked:** Allows Permission
   * **Unchecked:** Denies Permission
   * **Undefined (Default):** Automatically allows all permissions until group permissions are assigned. After group permissions are assigned, any user's permission, left in an undefined state, inherits the permissions assigned to the group.
2. Click **OK** to apply changes and close the popup.

### Permission Rules

Administrators can assign/deny permissions while standard users cannot. Assign to Users

|  |  |  |
| --- | --- | --- |
| **Action** | **For** | **Result** |
| Assign to a group. | Any user | Assigns all group permissions to the user. |
| Assign to a group with a denied permission. | Any user | Overrides any undefined permission for the user. |
| Assign to a group with a denied permission. | User in multiple groups | Overrides any undefined permission for the user.  Overrides any allowed permission for the user. |
| Assign as the Project Owner. | Any user | Overrides any permission restrictions. |
| Assign a user to the Administrators Group. | Any user | Assigns the user all permissions. |
| Deny permission. | Any user | If a user is denied a permission, this overrides the permissions that relate to any group of which the user is a member. |
| Allow permission. | Any user | If a user is allowed a permission, this overrides the permissions that relate to any group of which the user is a member. |
| Allow/Deny a portfolio/project permission. | Any user | Overrules any group or system level permissions. |
| Do not define any permissions. | Any user | Allows every user all permissions, unless the user is a part of a group with restricted |

|  |  |  |
| --- | --- | --- |
|  |  | permissions. In such a case, the restrictions assigned to the group apply to the user. |

Assign to Groups

|  |  |  |
| --- | --- | --- |
| **Action** | **For** | **Result** |
| Do not define a permission. | Group | Automatically allows all users in the group the permission. |
| Deny a permission. | Group | Denies all users in the group the permission. |
| Allow a  permission. | Group | Assigns all users in the group the  permission. |
| Do not define a permission.  Deny a permission.  Allow a permission. | Every one Group | All users are automatically assigned to the Everyone group, and cannot be deleted from the Everyone group.  Otherwise, follows all the same rules as other groups. |

Override Permissions

|  |  |  |  |
| --- | --- | --- | --- |
| **Action** | **For** | **Result** | **Example** |
| Allow/Deny at the system level. | Users or Groups | Overrides any portfolio or project level permissions in an undefined state. | Set Export Projects to Undefined.  Now the default is that all users and all groups can export a project. |
| Allow/Deny at the portfolio level. | Users or Groups | Overrides the system level permissions. | Set Export Projects to Deny for a group.  Now users in the group cannot export a project. However, these users can still export a project in another portfolio where the undefined state applies or where the permission is set to Allow. |
| Allow/Deny at the project level. | Users or Groups | Overrides the system level and portfolio level permissions. | Set Export Projects to Allow for a user.  Now the user can export that project. However, the user cannot do so for other projects or portfolios for which the permission has been denied. |

See Also: Login Settings

## Logon Settings

Navigation: **File tab>Control Panel>Security>Logon Settings**. Specify a method to logon to ARGUS Developer.

Logon Settings window

Choose a username and password defined within ARGUS Developer, or choose a logon method determined by using Microsoft’s Active Directory.

ARGUS Developer internal user name and password

Select this option to use an internally-created username and password, which are set up in the Users section.

Active Directory

Select the Use Active Directory logon. Active Directory will log you on automatically.

Note: The program will close if you change the primary logon method. You will need to restart and use the new logon method.

Note: If your Windows Active directory has a large number of users, the following will facilitate the setting up of users in ARGUS Developer.

* Create a specific Windows Active directory group e.g. ADUserGroup, to hold all the users that will be using ARGUS Developer
* Before setting up Users in ARGUS Developer, open the devdir.ini file (using a tool such as Notepad). This is located in the ProgramData>ARGUS Software>ARGUS Developer folder
* Add the following lines to the devdir.ini file:
  + [ActiveDirectory]
  + SecurityGroup=ADUSerGroup (this is the name of the group you have created)
* Save & close the file then open ARGUS Developer. When you setup Users, you will only be presented with the list of usernames for that specific group e.g. ADUserGroup.

See Also: Change Password

## Cash Flow Preferences

File tab>Control Panel>System Settings>Preferences>Cash Flow Preferences

The Cash Flow Preferences tab allows you to adjust preferences for displaying and formatting the Cash Flow report and includes the following sections:

* Display
* Display Columns
* Formatting
* Editing

### Display

Show Row Properties

If this option is checked, additional columns will be displayed on the left hand side of the Cash Flow screen, showing additional information about each row in the cash flow. You can display more data columns in the Cash Flow by clearing this check box to hide these columns.

Show Brief Finance Details

When Basic Finance (Interest Sets) is applied to a project, you can hide some of the VAT, Interest and Inflation data rows in the Finance Cash Flow by selecting this option. Select the **Brief Finance Display** option to hide Interest and Inflation Rate rows. If VAT has been set for any items, the program will show VAT paid and reclaimed, regardless of the **Brief Finance Details** option.

Show Row Total Column

An additional column at the start of the cash flow is displayed showing row totals when this option is checked. Clear the **Show Row Total Column** option to hide this column.

Show PV Column

An additional column at the start of the cash flow is displayed showing the row total's present value when this option is checked. Clear the **Show PV Column** option to hide this column.

Show Cost Code Column

An additional column is displayed showing the cost code details in the Project and Finance Cash Flow reports.

Show Time Line

The Time Line is displayed at the top of the cash flow directly beneath the date row, indicating the duration of each stage of the project, when this option is selected. If this check box is cleared, the time line will not be displayed.

Show Period Zero

If you check this option, period zero will be displayed in the Cash Flow and in the Data Distribution window, on the Editor tab. By default, this option is switched off.

Show MRV History Rows

If this option is checked, additional rows will be displayed in the cash flow showing the market rental value (MRV) for each unit of accommodation defined in the Capitalised Rent screen during the cash flow, taking into account any rental growth settings. These rows are hidden from calculations. To hide these rows from display, clear the **Show MRV History Rows** option.

Show MRV Rows

If this option is checked, a separate row showing the market rental value (MRV) at exit for each unit of accommodation defined in the Capitalised Rent screen will be displayed in the cash flow. If this check box is cleared, then MRV rows will not be displayed.

Show Completion Amount Rows

Additional rows are displayed showing the completion amount details in the Project and Finance Cash Flow reports.

Show Zero Value Rows

If this option is checked, all zero value rows will be displayed in the cash flow. If this option is not checked, then any zero value rows will not be displayed.

Show Unit Information Rows

If this option is checked, rows showing information about the number of units under construction will be displayed in the cash flow.

Show Summaries

If this option is checked, a summary total row will be displayed at the bottom of each section in the cash flow.

Show Summaries in Bold

If this option is checked, the summary total row will be displayed in bold.

Show Escrow Account

If this option is checked, the escrow account details will be displayed in the cash flow.

### Display Columns

Released Budget Total

If this option is checked, the released budget total will be displayed in the cash flow.

% of Total Budget Released

If this option is checked, the % of total budget released will be displayed in the cash flow.

Budget to be Released

If this option is checked, the budget to be released will be displayed in the cash flow.

Split Period Cycle into months when period contains Forecast and Actual amounts If this option is checked, the system will split the cycle into months when the period contains forecast data.

% of Released Budget Spent

If this option is checked, the percentage of released budget spent will be displayed in the cash flow.

% of Total Budget Spent

If this option is checked, the percentage of total budget spent will be displayed in the cash flow.

Released Budget Outstanding

If this option is checked, the released budget outstanding will be displayed in the cash flow.

Total to Date

If this option is checked, the total to date will be displayed in the cash flow.

Forecast to Completion

If this option is checked, the forecast to completion will be displayed in the cash flow.

### Formatting

Font for Cash Flow

You can choose the font used to display the Cash Flow data on screen. Drop down the font and font size selector to choose the font name and font size.

Negative Number Format

You can choose from three different formats for displaying negative numbers in the cash flow: plain, -ve sign or bracketed.

Use 1000's Separator

You can format numbers with or without a separator between every third digit. To include a separator, select the **Use 1000's Separator** option.

### Editing

Editing non-monthly cash flows

If you are editing a cash flow that is displayed in a non-monthly cycle, such as quarterly or annual, ARGUS Developer needs to know where it should place any edited values. You have the option of placing the value at the start of the cycle or at the end of the cycle; in other words, if you were editing a quarterly cash flow, the value would be placed in either the first month of the quarter or in the final month of the quarter.

Deleting rows based on rent or sales areas

When you are deleting area-based rows from the cash flow, you can make the program automatically delete the area record that generated it. This means that any other rows linked to the same record, such as the MRV or capitalised rent will be automatically deleted.

Alternatively, rather than remove the area record, you can make the program keep the area record and any linked rows. In this case, only part of the area record will be removed and its relevant field values set to zero.

|  |  |
| --- | --- |
| **To** | **Do This** |
| Delete the area record and any linked rows. | Select the Remove Linked Area Records check box. |
| Keep the area record any linked rows. | Un-check the Remove Linked Area Records check box. |

## Summary Preferences

Navigate: ARGUS Enterprise>Control Panel>System Settings>Preferences>Summary The Summary allows you to adjust preferences and includes the following sections:

* Show Itemised Schedules
* Show Performance Measures
* Formatting

### Show Itemised Schedules

Rental Area Summary

To include a summary of all rental areas at the beginning of the report, check the **Rental Area Summary** option. To remove the summary, uncheck the option. The advantage of

not including the rental area summary is that the report will not contain as many columns; therefore, printing on a single page across.

Investment Valuation

Select the **Investment Valuation** option to show the full Investment valuation on the Summary page which displays a breakdown of each of the Sales and Capitalised Rent definitions including the number of units, area, rate and yield. To show a summary of sales and rents, clear the **Investment Valuation** option.

Itemised Tenant Income

When tenants' income flow is activated in the cash flow, a breakdown by accommodation unit is displayed in the Summary screen when the **Itemised Tenant Income** option is selected. To display a single summary line only, clear this option.

Itemised Rent Free Costs

You can show a detailed list of the Rent Free costs by selecting the **Itemised Rent Free Costs** option. To show a summary line that shows only the total cost, clear the option.

Itemised Additional Revenue

You can show full schedule of additional revenue, including the heading and amount, by selecting the **Itemised Additional Revenues** option. To show a summary line that shows only the total additional revenue, clear the option.

Itemised Fixed Acquisition Costs

A full schedule of all fixed acquisition costs will be displayed in the Summary report if this option is checked. To show a summary line of the total fixed acquisition costs only, clear the option.

Itemised Other Acquisition Costs

To show a full schedule of Other Acquisition Costs in Summary select the **Itemised Other Acquisition Costs** option. To show a summary line that shown only the total costs, clear the option.

Itemised Construction Costs

To show a breakdown of each of the Construction Cost definitions that includes the number of units, area and rate, select the **Itemised Construction Costs** option. To show a summary line instead, clear the option.

Itemised Other Construction Costs

You can show a full schedule of Other Construction Costs, including the heading and amount, by selecting the **Itemised Other Construction Costs** option. To show a summary line that shows only the total costs, clear the option.

Itemised Section 106 and 278 Costs

You can show components of the calculation for these costs on the Summary report by selecting the **Itemised Section 106 and 278 Costs** option.

Itemised Additional Costs

To show a full schedule of any additional costs defined, including the heading and amount, in summary select the **Itemised Additional Costs** option. To show a summary line that shows only the total costs, clear the option.

Itemised Other Professional Fees

You can show a full list of all the other professional fees, including the heading, percentage and amount, by selecting this option. To show a summary line that displays only the total amount, clear the option.

Itemised Inflation/Growth Schedule

The Inflation/Growth schedule can be included at the end of the Summary report by selecting the **Inflation/Growth Schedule** option. The schedule shows each item in the Area Schedules to which inflation or growth has been applied. Each line shows the area item heading, the un-grown capitalised rent, the amount of growth and the total capitalised rent (with growth) for the item.

Itemised Purchaser's Costs

Click this option to displays all purchaser's costs in the Summary. Deselect this option to display only the total.

Timescale

You can show a summary of the phase time scale detailing the length and date of each stage by selecting the **Timescale** option. This time scale summary is displayed in the Finance section of the Summary. The time scale is only shown for single phase projects or, in a multi-phased scheme, when a single phase is viewed.

### Show Performance Measures

Pre-Finance IRR

The Pre-Finance IRR is the IRR calculated for the project before the effect of any financing. You can enable or suppress the display of the Pre-Finance IRR on the Summary screen and printed report by checking or un-checking the option.

IRR

The IRR is the IRR calculated for the project after the effect of financing. You can enable or suppress the display of the IRR on the Summary screen and printed report by checking or un-checking the option.

Equity IRR (Composite)

The Equity IRR is calculated from an aggregated cash flow for all Equity funding sources. You can enable or suppress the display of the Equity IRR on the Summary screen and printed report by checking or un-checking the option.

IRR Scenario Dates

To display the start and end dates of the period over which the IRR is calculated, select the **IRR Dates** option. The default setting for the IRR calculation is from the start date to the exit date of the phase or project selected. To hide these dates from view, clear the **IRR Dates** option.

NPV (at Manual Discount Rate)

You can enable or suppress the display of the NPV on the Summary screen and printed report by checking or un-checking the option.

Return on Equity (Composite)

The return on equity is calculated from an aggregated cash flow for all Equity funding sources. You can enable or suppress the display of the return on equity on the Summary screen and printed report by checking or un-checking the option.

After Tax Equity IRR (Composite)

The after tax equity IRR is calculated from an aggregated cash flow for all Equity funding sources after any tax has been deducted from profit distributions. You can enable or suppress the display of the After Tax Equity IRR on the Summary screen and printed report by checking or un-checking the option.

After Tax Return on Equity (Composite)

The after tax return on equity is calculated from an aggregated cash flow for all equity funding sources after any tax has been deducted from profit distributions. You can enable or suppress the display of the after tax return on equity on the Summary screen and printed report by checking or un-checking the option.

After Tax IRR

The after tax IRR is calculated from an aggregated cash flow for all funding sources after any tax has been deducted from profit distributions. You can enable or suppress the display of the After Tax IRR on the Summary screen and printed report by checking or un-checking the option.

Profit on Cost, Profit on GDV, Profit on NDV

There are three types of profit measure you can specify here. You can enable or suppress the display of the profit on cost, profit on GDV, or profit on NDV on the Summary screen and printed report by checking or un-checking the appropriate options.

Development Yield

You can enable or suppress the display of the development yield on the Summary screen and printed report by checking or un-checking the option.

Rent Cover

You can enable or suppress the display of the rent cover on the Summary screen and printed report by checking or un-checking the option.

Profit Erosion

When you are working in basic finance mode, you can enable or suppress the display of the profit erosion on the Summary screen and printed report by checking or un-checking the option.

Gross Margin %

You can enable or suppress the Gross Margin results to display on the Summary screen and printed report by checking or un-checking the option.

Yield on Cost

You can enable or suppress the display of the yield on cost on the Summary screen and printed report by checking or un-checking the option.

Stabilised NOI

You can enable or suppress the Stabilised NOI results to display on the Summary screen and printed report by checking or un-checking the option.

Note: When all phases do not have the same stable income date, the label does not display the date.

Equivalent Yield (True), Equivalent Yield (Nominal)

You can enable or suppress the display of the equivalent yields on the Summary screen and printed report by checking or un-checking the option.

Gross Initial Yield

You can enable or suppress the display of the gross initial yield on the Summary screen and printed report by checking or un-checking the option.

Net Initial Yield

You can enable or suppress the display of the net initial yield and the net initial yield on the Summary screen and printed report by checking or un-checking the option.

Cost per Gross ft²

You can enable or suppress the display of the cost per gross ft² or gross m² on the Summary screen and printed report by checking or un-checking the option.

Cost per Net ft²

You can enable or suppress the display of the cost per net ft² or gross m² on the Summary screen and printed report by checking or un-checking the option.

Land Cost per Acre

You can enable or suppress the display of the land cost per acre on the Summary screen and printed report by checking or un-checking the option.

Floor Area Ratio

You can enable or suppress the display of the on the Summary screen and printed report by checking or un-checking the option.

Capitalised Rent per Net ft²

You can enable or suppress the display of the capitalised rent per net ft² or gross m² on the Summary screen and printed report by checking or un-checking the option.

**Note:** If the measurement units are changed to metric, the caption will read land cost per square meter.

### Formatting Options

Visible Columns

The Summary is displayed on an invisible grid. You can set the number of columns in the grid by typing a number between five and nine into the Visible Columns box. The Summary template has eight columns at present; the extra one is for future expansion. You must set the number of visible columns to eight in order to display the full Investment Valuation in the Summary.

Heading Column Width (Pixels)

You can set the width of the column used to display the line headings by typing a number between fifty and three-hundred into the Heading Column Width (Pixels) box. You may need to adjust this setting after changing the font size or to suit the resolution of your monitor.

Data Column Width (Pixels)

You can set the width of the column used to display each item's values, totals and sub- totals by typing a number between forty and three-hundred into the Data Column Width (Pixels) box. You may need to adjust this setting after changing the font size or to suit the resolution of your monitor.

Number of Decimals

To increase or decrease the precision of figures on the Summary and printed reports, you can specify the number of decimal places using the spinner arrows.

Font name

You can select the type of font to use on the Summary screen.

Font size

You can select the size of the font to use on the Summary screen.

## Licence Options

Navigation: **File tab>Control Panel>Licence Options**

The Licence Options section only appears if combination licensing is in use. You can have multiple licence options that offer different modules to select from.

Select a licence option from the drop-down list. Choose from:

* **Standard Licence**
* **Option 1**
* **Option 2**
* **etc.**

The licence options depend on your activations from the Licence.exe utility. To view licence information after selection, go to the Help tab Licencing section.

For more information, see the Installation Guide on the Support site: [http://www.argussoftware.com/argus-developer-downloads/.](http://www.argussoftware.com/argus-developer-downloads/)

## Refresh Current Project/All Projects

Navigation: **File tab>Control Panel>System Maintenance**

## Refresh Current Project

### Purpose

Refreshes the report data for the current project that has been opened.

## Refresh All Projects

### Purpose

Refreshes the report data for all projects in your database.

## Information

Navigation: **File tab>Information**.

Review information about the currently open project and track user actions.

### Information

The first three fields will change accordingly whether your project is opened from a file or the database.

File Name or Project ID

This field displays the file name or Project name assigned to the current project.

File type or Project ID

This field displays the file type for the project or the Project ID.

Location or Portfolio

This field displays the current location of the file or which Portfolio the project belongs to.

Format

This field displays the file format for the project.

Size (bytes)

This field displays the file size in bytes for database management.

Last saved date

This field displays the most recent date and time the current project was saved.

Saved by application version

This field displays the application version number.

Saved by application build

This field displays the build number of the application in which the current project was saved. This number is especially useful when you are ready to upgrade.

Read only

This field indicates whether the project file can be edited by the user (No) or cannot be edited by the user (Yes).

Created By

This field displays the server and username as entered in the **Created By** field on the Project tab.

Company

This field displays the company name as issued through your licence key.

Date

This field displays the date and time the file was saved by each listed user.

Action

This field displays the action performed by the user.

Version

This field displays the application build number in which the data was saved.

# Calculation Assumptions

Navigation: Home Ribbon>Calculation Assumptions>Assumptions

## Assumptions

Calculation assumptions are all the option settings that control how the program will calculate rents, fees, interest, inflation and so on. It is important to check these settings the first time you start the program to see if they are suitable for the way your organisation works.

* [Expenditure](#_bookmark102)
* [Receipts](#_bookmark104)
* [Finance](#_bookmark107)
* [Calculation](#_bookmark108)
* [KPIs](#_bookmark110)
* [Interest Sets](#_bookmark112)
* [Inflation/Growth](#_bookmark114)
* [Residual](#_bookmark115)
* [Distribution](#_bookmark116)

Any changes you make to the settings will be saved with the project data file. Some of the things you can do in this screen are:

* Select the assumptions for receipts and income flow
* Specify how purchaser’s costs are treated
* Specify the finance setup - Structured Financing or 100% debt funding
* Specify Residual targets for the Land Acquisition Price
* Specify the distribution curve type for construction payments

## Expenditure

Navigation: Home Ribbon>Calculation Assumptions>Assumptions>Expenditure

Professional Fees are based on Construction

Professional fees are related to the base construction costs and construction breakdown costs. In addition, you may include contingency and demolition/road costs:

#### Plus Contingency

* **Plus Demolition & Road / Site Works**

Purchaser's Costs

Purchaser's Costs may be viewed in two ways - as (a) a deduction from the gross capitalisation, or (b) as an addition to the total costs:

* **Deducted from Revenue** - Select to deduct purchaser's costs from the gross capitalisation and place them in the Realisation section of the Summary.
* **Added to Costs** - Select to add Purchaser's Costs to the total project costs and show them in the Costs section of the Summary.

There are two options for the calculation of purchaser's costs. Calculated on:

#### Gross Development Value

* **Net Development Value**

In some circumstances, it will be appropriate to include sales in addition to capitalised rent in the calculation of purchaser's costs. Click the drop down for **Direct Sales** and choose from:

* **Do not include sales:** Do not display sales amounts.
* **Include sales and deposit amounts:** Display the deposits and balance of sales separately.
* **Include completed sales amounts:** Display the completed sales amount.

Sales may include housing for example, where the net value, or price, of the house is the known value. Capitalised rents would, conversely, be discounted to calculate the price from a known gross value which includes purchaser's costs.

If you cannot see the Purchaser's Costs entry box on the Definition Screen, follow the steps below:

1. Select the **ARGUS** Button >> Control Panel >> Options >> General tab >> Show Purchaser's Costs.
2. Select the **Show Purchaser’s Costs** option.

Sales Fees

Sales Fees may be viewed in two ways - as (a) a deduction from the gross capitalisation, or (b) as an addition to the total costs.

* + **Deducted from Revenue** - Select to deduct Sales Fees from the gross capitalisation and place them in the Realisation section of the Summary.
  + **Added to Costs** - Select to add sales fees to the total project costs and show them in the Cost section of the Summary.

There are two options for the calculation of sales fees. Calculated on:

#### Gross Development Value

* + **Net Development Value**

Unsold Unit Fees

Apply Unsold Unit Fees. Based on:

* + **Planned Completions**
  + **Actual Completions**
  + **Apply to all areas**

Value Added Tax

Calculate VAT on Revenues as a negative amount Click checkbox to calculate.

Infrastructure Cost Allocation

Ignore sign of period total when calculating allocation

Click checkbox to ignore the sign of the period total in an infrastructure cost cash flow when calculating allocation.

## Receipts

Navigation: Home Ribbon>Calculation Assumptions>Assumptions>Receipts

Rental Income

ARGUS Developer will automatically generate an income stream for tenants where developments are retained as investments or where pre-lets are achieved. Before an income stream can be generated, valid lease terms must have been entered for the

appropriate tenants. Where lease terms have not been entered, no income stream will be generated.

|  |  |
| --- | --- |
| **To** | **Do This** |
| Generate an income flow from the tenant's lease. | Select the **Show tenant's true income stream**  option. |
| Use the income streams to offset development costs. | Select the **Offset income against development costs** option. |
| Add the income streams to the project's revenue balance. | Un-check the **Offset income against development costs** option. |
| Set the rent payment cycle for existing tenants definitions and each new tenant. | Select the rent payment cycle in the drop-down box and check the **Apply Cycle to all tenants** option. |
| Set the rent payment cycle for new tenants, leaving the existing tenants alone | Select the rent payment cycle in the drop-down box and uncheck the **Apply Cycle to all tenants** option. |
| Apply a Renewal Void and Rent Free period for the first lease renewal only. | Select the **Renewal Void and Rent Free apply to first renewal only** option. |
| Specify a Renewal Void and Rent Free period for all lease renewals. | Un-check the **Renewal Void and Rent Free apply to first renewal only** option. |
| Specify that the growth starts from the Lease Start Date. | Select the **Growth starts from Lease Start Date** option. |
| Specify that the Ground Rent is deducted from Stepped Rent. | Select the **Deduct Ground Rent From Stepped Rent** option. |

Note: When income is generated, the Rent Free Cost options will be disabled, as the Rent Free period will be accounted for within the cash flow.

Capitalisation

|  |  |
| --- | --- |
| **To** | **Do This** |
| Calculate the capital value for each tenant using the hard core method of valuation. | In the **Capitalisation Method** drop-down, select the Hardcore option. |
| Calculate the capital value for each tenant using the Initial Yield method of valuation. | In the **Capitalisation Method** drop-down, select the Initial Yield option. |
| Calculate the capital value for each tenant using the forward project of twelve months’ NOI from the Sale Date. | In the **Capitalisation Method** drop-down, select the Capitalise twelve month NOI option. See [Calculation of NOI for Capitalisation based on](#_bookmark105) [twelve months from date of sale](#_bookmark105). |
| Apply a default capitalisation yield to a new tenant as it is created. | Enter the desired capitalisation yield into the  **Default Capitalisation Yield** field. |

|  |  |
| --- | --- |
| **To** | **Do This** |
| Apply the same capitalisation yield to all existing tenants and to all new tenants. | Select the **Apply Yield to all tenants** option. |
| Allow users to establish a tenant by tenant capitalisation rate. | Un-check the **Apply Yield to all tenants** option. |
| Automatically assign a sale date to each tenant. | Select the **Default stage for Sale Date** and choose a stage in the drop-down list. |
| Synchronise the end of the income flow with the sale of the property, where lease ends before sale date. | Select the **Align end of income stream to Sale Date** option. |
| Synchronise the end of the income flow with the sale of the property for all tenants. | Select the **Apply Alignment to all tenants**  option. |
| Reduce the capital value by deducting the Post Sale Tenant Improvement Costs and Lease Commissions when the Capitalise twelve month NOI" method is active. | Select the **Deduct Post-Sale TI Costs and Lease Commissions from Capital Value** option. |

If Capital Value is modified

When you are editing area-based items in the Cash flow, for example, a sales receipt or a construction cost, ARGUS Developer will update the linked area record automatically. However, when a capitalised rent is changed, there are two possibilities for updating the area record:

* Recalculate the yield but keep the same rent rate or:
* Recalculate the rent rate but keep the yield the same.

Select Recalculate the Yield or Recalculate the Rent Rate or Market Rental Value as appropriate.

Valuation Tables

You can choose the way in which rents and ground leases are valued from the **Valuation Tables** option. Options available are: Annually in Arrears, Quarterly in Advance (Effective) and Quarterly in Advance (Nominal).

Deduct Post-Sale TI Costs and Lease Commissions from Capital Value

Click this check box to [reduce the proceeds](#_bookmark106) of the sale when this capitalisation method is active.

Rent Free Costs

There are several approaches to the calculation of rent free costs.

If you have selected to Show tenant's true income stream, the start of the rent flow will be delayed by the length of the rent free period. The options shown in the Rent Free Costs section will be unavailable.

In cases where income streams are not required, there are two methods to represent the loss of income:

* **Defer the Capital Value:** Change the capital value by applying a present value calculation to each tenant. Each capital value will be discounted, or deferred, by the length of the Rent Free period using the capitalisation rate.
* **Deduct a proportion of MRV:** Take a proportion of the MRV and either Deduct Rent Free from Revenue or Add Rent Free to Costs.

Calculation of NOI for Capitalisation based on twelve months from date of sale Calculations

The **Capitalise twelve month NOI** option uses the following calculation methodology:

Base Rental Income - includes the following

* Base Rent from current term at the time of sale and continuing as per the actual term of the lease (such as growth or steps if any).
* If the current term ends during the twelve month period, market rental value during any vacant and/or rent free periods.
* Renewal rent for any subsequent term(s) that fall within the twelve month period.

**Note:** All of these are subject to any void percentage or fixed amount that was applied at the point of sale (in other words, under the Capitalisation section of the Area form). The aggregate of these is the basis of capitalisation for the base income component. No further adjustment is made where there is rental loss due to vacancy or rent free.

**% Rent:** if there is any turnover rent calculated, it would only apply for the remainder of the term in effect at the time of sale (maximum of twelve months), plus any renewal (only where there is no vacancy or rent free between terms) that falls within the twelve month period. No adjustment would be made for market turnover rent or any renewals where there has been a vacancy or rent free period.

**Rent Additions and Costs:** Only those that are capitalised are included. Rent additions and costs are calculated during periods of rent free, so only the treatment of rent additions and costs during vacancy need to be considered. Since base rent is being calculated during periods of Vacancy, rent additions, and costs are included also to simulate having a lease in place. Therefore, rent additions and costs are included during the entire twelve month period, with no need to do separate calculations for each base term/vacant/renewal segment that could be included in the twelve months. These are not subject to vacancy at this time.

**TIs and Lease Commissions:** It is possible to have TIs and/or commission costs payable in respect of a new or renewal lease that would commence during the twelve month projection. On the Receipts tab in the Capitalisation area, if the **Deduct Post- Sale TI Costs and Lease Commissions from Capital Value** option is checked on, this reduces the proceeds of sale when this capitalisation method is active.

|  |  |
| --- | --- |
| If | Then |
| There is no void period. OR  There is a void period, and the sale date is not within 12 months of the void period. | * Does not reduce the capitalisation value by the TI cost. * Treats TI cost as costs in the cash flow. |
| There is a void period. AND  The sale date is within 12 months of the void period. | Reduces the capital value by the amount of the TI cost. |

Growth and Inflation

During the twelve month run off period, it is assumed:

* Growth will continue on rent, turnover rent and additional rent revenues.
* Inflation will continue on TI costs and additional rent costs. Historic Data Files

Existing files default to calculate according to the current calculation methodology, in

respect of capitalisation (in other words, "off") so values will not change on existing files.

## Finance

Navigation: Home Ribbon>Calculation Assumptions>Assumptions>Finance

Financing Method

Finance in ARGUS Developer can be analysed in different ways:

* **Basic (Interest Sets):** Offers 100% debt funding. Select Basic to edit the options on this page.
* **Structured Financing:** Structured Finance assumptions are input in a separate window. All options on this page disable when selected. See Structured Finance for a detailed explanation on Structured Finance.

Interest Calculation Methods

* **Compounding Period:** This is the period when the interest is added to the principal amount. Options are Monthly, Quarterly, Semi Annual and Annual.
* **Charging Period:** This is the period when the interest amount is charged and shown in the cash flow. This setting does not affect the calculation of interest. Options are Monthly, Quarterly, Semi Annual and Annual.

Interest Rate Type

* **Nominal rates of Interest:** Apply nominal rates of interest when calculating interest costs.
* **Effective rates of Interest (APR):** Apply effective (APR) rates of interest when calculating interest costs.

Options

* **Calculate interest on Payments/Receipts in final period:** Allow interest to roll up into the Exit Period of the cash flow. Un-check this option and interest does not charge in the Exit Period.
* **Include Interest and Finance Fees in IRR Calculations:** Include the interest values and finance arrangement fees when calculating the IRR for the project.
* **Automatic inter-account transfers:** Transfer a surplus in any of the interest accounts to pay down costs in other accounts. This option is normally left unchecked.
* **Manual Finance Rate for Profit Erosion:** Enter a finance rate to calculate the profit erosion. Profit erosion is displayed on the Summary page.

## Calculation

Navigation: Home Ribbon>Calculation Assumptions>Assumptions>Calculation

If you cannot see these options on your screen

1. Select the **ARGUS** Button > Control Panel > Options > General tab.
2. Check the box for **Show Calculation Assumptions**.

Timing

* + **Site Payments are in:** If site payments take place at the beginning of each period, select Advance. If they take place at the end of each period, select Arrears**.**
  + **Other Payments are in:** If payments other than site payments take place at the beginning of each period, select Advance. If they take place at the end of each period, select Arrears.
  + **Negative Land is in:** If negative land payments take place at the beginning of each period, select Advance. If they take place at the end of each period, select Arrears.
  + **Receipts are in:** If receipts take place at the beginning of each period, select Advance. If they take place at the end of each period, select Arrears. Receipts are usually in advance.

IRR and Discounting Options IRR Basis

Select the basis on which the IRR is to be calculated:

* + **Annualised (Monthly):** This is the default and applies IRR to the monthly cash flow then annualises it by applying the formula: Annualised (Monthly) = ((1+IRRm)^12)-1; where IRRm is the IRR applied to a monthly cash flow.
  + **Annual:** Applies IRR to the annual cash flow. This modified calculation matches the IRR calculation in Excel. Warning: Using an annual basis is slightly less accurate than using an annualised monthly basis.

Note: If you select an annual basis for IRR and a monthly cycle, when you export the report, the IRR will not match the Excel calculation.

Cash Flow Cycle

There is a small difference between the IRRs for monthly and annual cash flow cycles because the Excel automatically treats every column as a year.

If you compare ARGUS Developer IRRs to those in Excel:

|  |  |  |
| --- | --- | --- |
| **IRR Basis** | **Monthly (Cash Flow Cycle)** | **Annual (Cash Flow Cycle)** |
| Annualised Monthly | Match | Difference |
| Annual | Difference | Match |

Verify Annual IRR Calculation with Excel

Verify that the Developer and Excel annual IRR calculations match:

1. Go to Project Cash Flow/Finance Cash Flow.

#### Go to Cash Flow Ribbon>View>Cycle>Annual.

Result: Report displays annual values.

1. Right click on report and select Export Full Cash Flow.
2. Result: Opens Excel and displays each year as a single column.
3. Type the Excel formula into an open cell: =IRR(range of Net Cash Flow IRR)
4. Compare the two IRRs.

Initial Guess Rate

The IRR calculation requires a starting point. This option is used to specify that point and is defaulted to 8%. It will not normally be necessary to change this value. The **Minimum** and **Maximum IRR** options refer to the thresholds within which an IRR will be reported. If the calculated IRR is outside either of the specified thresholds, it will be reported as "Out of Range" in the KPI Dashboard.

Manual Discount Rate

Where the cash flow is to be discounted at a rate other than the IRR, select this option and enter the discount rate. The present value and rate will be shown in the Performance Measures section of the Summary report.

IRR Tolerance

When calculating an IRR, ARGUS Developer discounts the cash flow repeatedly until the Net Present Value falls between zero and the IRR tolerance.

Minimum IRR

Here, you can specify a lower threshold. If it is under this threshold, an IRR will be reported as Out of Range.

Maximum IRR

You can use this field to specify a higher threshold. If it is over this threshold, an IRR will be reported as Out of Range.

Iterations

Type the number of iterations. The default is 35, but not all projects require this. There are occasions where 35 iterations are not enough – increasing this number to 50 or 100 is sometimes sufficient to achieve a stable point.

Calculation Options

Calculate Letting and Rent Review Fees on

Letting and rent review fees calculate against the **Gross MRV** or the **MRV Net of Deductions**.

If you cannot see the Purchaser's Costs entry box on the Definition screen

1. Select the **ARGUS** Button > Control Panel > Options > General tab.
2. Select the **Show Letting / Rent Review Fees** option.

Calculate Void Costs on

Void costs can either be calculated against the **Gross Area** or the **Net Area** (area after deductions).

Calculate Leasing Commissions on

This option allows the % of Base Rent or % of Gross Rent Leasing Commissions to be calculated either before non-recoverable costs have been deducted, or afterwards.

The method used up to, and including, version 4.05, was to deduct the non-recoverable costs for the first term of the lease only, then calculate leasing commissions. All renewal terms calculated the leasing commission before any non-recoverable costs were deducted.

* + **Rent before Non-Recoverable Cost deductions:** Select this option to calculate the leasing commission before non-recoverable costs are deducted from the rent.
  + **Rent after Non-Recoverable Cost deductions:** Select this option to calculate the leasing commission after non-recoverable costs are deducted from the rent.
  + **Calculate commission for initial lease term only:** Select this check box if you want to deduct non-recoverable costs for the first term only, before calculating the leasing commission.

Leasing Commissions Calculated on Rent

This option allows the % of Base Rent or % of Gross Rent Leasing Commissions to be calculated either before non-recoverable costs have been deducted, or afterwards.

The method used up to, and including, version 4.05, was to deduct the non-recoverable costs for the first term of the lease only, then calculate leasing commissions. All renewal terms calculated the leasing commission before any non-recoverable costs were deducted.

* + **Before Non-Recoverable Cost Deductions:** Select this option to calculate the leasing commission before non-recoverable costs are deducted from the rent.
  + **After Non-Recoverable Cost Deductions:** Select this option to calculate the leasing commission after non-recoverable costs are deducted from the rent.
  + **For the first term of the lease only:** Select this check box if you want to deduct non-recoverable costs for the first term only, before calculating the leasing commission.

Land Residual

Land Residual, Goal Seeking, and Sensitivity all rely on iterative functions to calculate values. There are three standard functions:

Land Residual calculation function:

* + **Newton's method:** Calculates the Residual Value for most Project Cash Flows and takes the shortest time to complete. When the Residual Value cannot calculate using this method, it automatically starts using the Secant method.
  + **Secant method:** Calculates the Residual Value and takes a longer time to complete than the Newtons' method. This method calculates some values that Newton's method cannot. When the Residual Value cannot calculate using this method, it automatically starts using the Interpolation method.
  + **Interpolation method (Default):** Calculates the Residual Value and takes the longest time to complete compared to the other two methods. This method calculates some values that Secant's method cannot. When the Residual Value cannot calculate using this method, it automatically starts using the Interpolation method.

Note: If there are performance issues when calculating Analysis Results, it is recommended to switch this option to Newton's method.

## KPIs

Navigation: Home Ribbon>Calculation Assumptions>Assumptions>KPIs

Stabilised Yield NOI basis

Select one of the options below to decide which NOI to use when calculating Yield on Cost. The NOI includes rent, rent additions and costs, turnover/percentage rent, and operated asset revenues and expenses. Both methods take into account Rent Free, Vacancy Period, and Lease Renewals.

Note: When including Operated Assets into the NOI, the 12 month forward-looking NOI is used, regardless of the method you choose. If the operated assets dates are after the Stabilised Income Date, then the NOI for Operated Assets is not included.

* + **Annualised Current NOI:** Select this option to use the NOI at one period of time, which is the date selected in the Stabilised Income Month for Ratio Analysis, then multiplies that number by 12.
  + **12 month forward-looking NOI (Default):** Select this option to take NOI for 12 months, starting from the date selected in the Stabilised Income Month for Ratio Analysis.

Phase Group & Stabilised Income Date

Select a date from which Net Operating Income (NOI) is calculated from via the **Stabilised Income Date column** by clicking on the ellipsis. Note: The stable income date cannot be later than the project start date.

The NOI calculates for a 12 month period from selected date and is used for the **Yield on Cost** calculation.

This section only available for Basic Finance. For Structured Finance, the date must be selected via Stabilised Income Month for Ratio Analysis under the **General** tab in Structured Finance.

Development Yield, Rent Cover

The performance measures development yield and rent cover can be calculated on the gross exit MRV, or the exit MRV after deductions for service charges and/or ground rent. You can specify the calculation method by selecting either of the following radio buttons:

#### MRV at Sale Date(s)

* + **Rent at Sale Date(s)**

To enable compatibility with older versions of ARGUS Developer, **Development Yield**

options available here are:

* + **Include Tenants with no Capital Value:** If a tenant has no capital value because it is valued using a zero yield or an initial yield valuation, you can include the MRV by checking this option.
  + **Include Turnover Rent:** This option will only be visible if you have selected Show Net Development Yield option in the System Configuration setup window (see General System Configuration). This option allows you to include Turnover (or percentage) rent in the Development Yield calculation.
  + **Net of Non-Recoverable Costs:** To deduct percentage and/or fixed deductions from MRV, check this option.
  + **Net of Ground Rent:** To deduct Ground Rent from MRV, check this option.
  + **Net of Rent Additions/Costs:** To include Rent Additions/Costs, check this option.

If you cannot see the Development Yield options

1. Select the **ARGUS** Button > Control Panel > Options > General tab.
2. Select the **Show Net Development Yield** option.

## Interest Sets

Navigation: Home Ribbon>Calculation Assumptions>Assumptions>Interest Sets

ARGUS Developer enables interest to be calculated by applying Interest Sets to every item in the cash flow. A default interest set is automatically applied to each new cost and receipt as it is entered.

A Set is a group of interest rates that are identified by name and are entered by the user.

A common debit and credit interest rate, or Preferred Return, set is used when the

**Structured Financing** option is selected.

**Note:** When Structured Financing is used, an Interest Set is applied to a Source's total contributions, not to individual cost or receipt items.

Separate debit and credit rates are available when Basic (interest sets) are used.

Developer defaults to use the first set from the list shown to the left hand side of the window. Highlight an entry from the list and the relevant rates are shown in detail on the right.

Users can vary interest rates over time by entering changing rates and the number of months over which each interest rate will run. Rates are entered as annual equivalent values. Enter a rate for zero months and Developer will run this rate in perpetuity or, in reality, to the end of the cash flow.

All items with the same interest set will use the same rates when calculating finance. If you modify the rates within a set, ARGUS Developer recalculates the finance costs for all items attached to that set.

Interest is calculated on the net total amount in each period. Where the net period total is negative (in other words, an outflow), the Debit rate is applied. Where the net period total is positive (in other words, an income), the Credit rate is applied.

An interest set called Interest Set 1 is always created automatically when you start a new project.

Enter the Debit and Credit rates, and the number of months, into the table.

The example above features two Sets, although an unlimited number can be entered. "Interest Set 1" is highlighted in the set's title bar and the individual rates appear below it.

The project above is currently running Basic (Interest Sets), so both debit and credit rate columns are shown. Select **Structured Finance** and one interest rate column appears. The values entered are used for both interest charging and Preferred Return purposes.

Users can enter multiple interest rates against each loan type or Set. Interest calculations can therefore take account of anticipated interest rate changes over time. Whether the percentage rate is anticipated to run for 6 months or 36, the percentage rate is always an annual value. Entering zero months against a percentage rate means that rate will run in perpetuity from that point in time. We suggest users always enter zero months against the last rate. This ensures interest will always continue to be charged if the length of the cash flow is extended by one month or 30 years.

To add an Interest Set

1. Select the **Add New Set** command
2. Enter the name of the set into the title bar
3. Enter the debit and credit rates into the table

To delete an Interest Set

1. Select the set by clicking on its name or one of its rates
2. Select the **Delete Set** command on the tool bar

## Inflation/Growth

Navigation: Home Ribbon>Calculation Assumptions>Assumptions>Inflation/Growth

The following topic refers to Inflation, but the principles apply equally to rent growth sets. Inflation Sets

Cost Inflation is incorporated by attaching an Inflation Set - essentially a list of rates - to a cost in either the Definitions or the Cash Flow screen. An inflation set is a shorthand way of identifying inflation rates by a name. A set can hold up to ten different inflation rates, each of which becomes active on a specified date.

All costs attached to an inflation set will use the same rate when calculating inflation. If you modify the rate within a set, ARGUS Developer recalculates the inflation for all costs attached to that set.

A set called "Inflation Set 1" is created for each new project and more can be added when necessary. By default, a cost will not have inflation applied to it.

When a cost has inflation applied to it, the inflated figure is shown on all screens and reports.

To add an Inflation or Growth Set

1. Select the **Add New Set** command in the tool bar
2. Enter the name of the set into the title bar
3. Enter the options for stepped rent if applicable
4. Enter the rates and durations of each rate into the table. Where the duration is 0 for the final step, the rate will be used in perpetuity.

To delete an Inflation or Growth Set

1. Select the set by clicking on its name or one of its rates
2. Select the **Delete Set** command on the tool bar

**Note:** Inflation or growth will no longer apply to any cost that refers to the deleted set. If you want inflation applied to these items, you will need to attach another inflation or growth set.

To calculate stepped inflation or growth

1. Select the set and check the **Stepped** option
2. Select Pro-Rate to First Anniversary to calculate compounded inflation from the project start date.
3. Select Full Rate on First Anniversary to use the full annual rate on the first anniversary, rather than a monthly proportion.
4. Drop down the **Anniversary Month** to select the month on which inflation will be stepped.
5. Drop down the **Advance or Arrears** to select whether inflation is applied in advance or arrears.

## Residual

Navigation: Home Ribbon>Calculation Assumptions>Assumptions>Residual

In many development projects, when you first start putting the project together, the land cost is the unknown element. This is the cost that you want the program to calculate automatically from all other inputs. In other projects, the land cost is already known, and you are evaluating the finance costs or other scenarios.

The Residual Assumptions tab is where you can set up the way in which the land cost is entered and calculated.

The options that control the residual calculations are:

* + **Fixed Land Cost:** Where you enter the known land cost
  + **Residual Land Cost Only:** Where the program calculates the land cost using a target type
  + **Residual and Fixed Land Costs:** Where you enter a manual land cost and then let the program calculate the residual land cost, inclusive of the manual land cost.

To enter known land costs

1. Select the Fixed Land Cost option

To calculate the Residual Land Cost

1. Select the **Residual Land Cost Only** option
2. Enter the Target Type used to determine the land cost
3. Enter the target rate for each phase into the table

To enter a known land cost and calculate the Residual Land Cost (Basic Finance)

1. Select the **Residual and Fixed Land Costs** option
2. Enter the target type used to determine the land cost
3. Enter the target rate for each phase into the Phase Targets table

To enter a known land cost and calculate the Residual Land Cost (Structured Finance)

1. Select the **Residual and Fixed Land Costs** option
2. Enter the target type used to determine the land cost for each structure
3. Enter the target rate for each finance structure into the Finance Structure Targets table

### Residual Land Determinants

The determinants used to calculate the residual land cost are the Target Type and the Target Rate.

Click on the **Target Type** drop-down box and select a target. There are seven target measures: Profit on Cost, Profit on GDV, Profit on NDV, IRR, Equity IRR, Development Yield and Profit Amount.

The Target Rate is the value that the residual function will use as a threshold to determine whether the correct land cost has been found. All Target Types will require an entry to be made for each defined phase or finance structure.

Locked Value In phases or finance structures where the land cost is known, this option will exclude them from the residual land cost calculations. Using this option, you can mix both known and unknown land costs in the same project.

To allow entry of a known land cost on the Definition page, put a check in this field.

**Treat Negative Land as Revenue:** There may be some developments where the costs far outweigh any income receivable from the sale. If you are looking for a specific return in these circumstances, a negative land cost may be generated. In essence, the program treats a negative land cost as if it were an injection of money into the project so that a profit can be realised. Due to the sensitivity of the residual targeting function, it may be necessary to treat the negative land as an income rather than a cost. If the program is not producing a value, try checking the **Treat Neg. Land as Revenue** option.

Multi-Phasing - Single Land Cost

If you are working with a multi-phased project that uses basic interest, you can elect to calculate a single, up front land cost for all linked phases. When this option is active, the program will merge all linked phase cash flows before calculating a single land cost.

When viewing the cash flow or summary for individual phases, there will be no land cost or fees shown. To show the residual land cost valuation together with fees, select the Merged Phase tab in original linked Phases mode or in a new grouping.

If you are entering stamp duty and acquisition fees as percentage values, they must be entered into the first phase of your linked scheme. When the program is calculating the residual land cost, it will use the fee structure from the first linked phase.

To calculate a single land cost

1. Select Single Land Residual at project start from the **Multi-Phasing** drop-down list.
2. Choose a target type in the drop-down list.
3. Enter a value into the **Single Value (target rate)** field.

Multi-Phasing - Separate Valuations

You may elect to perform separate valuations for each phase in a linked scheme. When you select the Merged Phases tab, the individual valuations and cash flows from each phase will be added together in a single project cash flow. The interest will then be recalculated on the combined cash flow, giving a total interest cost that is different from the aggregate of interest costs in individual phases.

When viewing the cash flow or summary for individual phases, the land cost and fees will be included.

To calculate separate land costs

1. Select Separate Land Residual for each phase from the **Multi-Phasing** drop- down list.
2. Choose a target type in the drop-down list.
3. Enter a value into the target rate field. You may enter different rates for each phase.

Finance Structures - Single Land Cost

If your project is using Structured Finance and you have created user-defined Finance Structures, the Single Land Cost option is not available.

Finance Structures - Separate Structure Valuations

If your project is using Structured Finance, you can calculate the land cost for each structure. When you select the Merged Phases tab in a single structure, the Land Cost will be calculated.

When you select the Merged Phases tab for the All Active Structures phase group, each of the valuations and cash flows from the individual structures will be added together in a single project cash flow. This is a true aggregate of the total revenues, costs, interest and fees from each of the active finance structures.

## Distribution

Navigation: Home Ribbon>Calculation Assumptions>Assumptions>Distribution

Make settings for the default timing of construction payments, sales receipts and sales deposits on this page.

Construction Payments

Choose the manner in which construction costs will be distributed in the project. The default setting is S-Curve. This may be changed by selecting a curve type in the drop- down menu.

If a Weighted payment is selected, you can enter the weighting percentage value. A value less than 50% shows a straight-line curve whose values rise and a value greater than 50%, a curve whose values fall.

If you change the option for construction costs, when you click on the **OK** button you will be asked to confirm your change, and whether you wish to redistribute existing construction items.

Sales Receipts

Choose the manner in which Sales Receipts will be distributed in the project. The default curve type is Single. This may be changed by selecting a curve type in the drop-down menu.

Sales Deposits

Choose the manner in which sales receipts will be distributed in the project. The default is a monthly distribution. This may be changed by selecting a curve type in the drop- down menu.

# Timescale & Phasing

Navigation: File tab>Projects>Open Project>Timescale>Timescale & Phasing

Timescale & Phasing is a key component of ARGUS Developer. Each cost and revenue item is linked to the time scale so that a timed cash flow can be automatically generated and updated. Construction dates, lease starts, unit sales, finance structures, and interest costs all rely on the information entered into this area.

Developer is designed to make the timing and distribution of cost and revenue elements as easy as possible. By making changes to the start, end or duration of the different stages of a development time scale, the residual land cost, cash flows, financing, interest costs and key performance indicators are instantly updated.

## Development Timescale

Before any cost or revenue elements are entered into Developer, it is recommended that the Timescale be set up. This will allow you to use the full range of data distribution tools as you are entering time-based information.

## Ribbon

### Timing

Project Start Date

Select the ellipsis to change the project start date.

### Phases

New

Click to create a new phase.

New Infrastructure

Click to create a new infrastructure.

Delete

Select a phase and click **Delete**.

Insert

Select a phase and click **Insert** a new phase.

Copy

Select a phase and click **Copy** to copy the selected phase.

### Phase Groups

Groups

Click to open phase groups.

### Stages

Timeline Scale Choose a timescale:

* Scale to Fit
* Monthly
* Quarterly
* Semi-Annual
* Annual

Auto Adjust Stage Timing

Click the check box to automatically adjust stage timing.

Reset

Click to reset the timing.

### Reports

Preview Report

Click to view the report in a separate window.

Print Report

Click to open the Print popup.

### Show/Hide

Stage Anchors

Click the check box to display the stage anchors.

Extended Timing

Click the check box to display extended timing.

### Upper Grid

Phase Start Date

Click the ellipsis to change the phase start date.

Phase End Date

Displays the phase end date.

Phase Name

Type a name for the phase.

Phase Reference

Displays the phase reference number as imported from the invoice data. The phase reference number is a unique number and not mandatory. You can type the phase reference for each phase while creating a project. Phase reference numbers allow you to:

* Assign invoices to individual phases within the project.
* Align specific phase costs between Developer and internal accounting systems.

Phase Data Type

Select a phase data type in the pick list.

External ID

Type an ID number that will be used for export. The number can be unique but does not have to be unique. If you do not type a number here, the system generates a unique ID number during export that matches the format for ARGUS Enterprise.

No.

Displays the number for the phase in sequential order.

Development Stage Displays the stage name.

Duration (Mths)

Displays the number of months for the stage's duration.

Start Date

Click the ellipsis to change the start date for the phase.

End Date

Automatically changes/displays the end date for the phase.

Month/Years

Displays a graphical representation of the phase start/end.

### Lower Grid

Project Timescale

Displays a Gantt chart of the project phases.

## Editing Timescale & Phasing If a Budget Has Been Set

When building a feasibility model, you can re-arrange/edit phases even though certain parts or all of the model have had their budgets set. This is important for planning multi- phase developments over extended periods and/or master planning of large sites where future phases are still in flux.

### Parameters

* You can re-model the timing of future phases.
* You can track/monitor the changes against the overall budget.
* You can edit stage durations.
* You can drag/drop/copy/delete new phases.
* After actuals are imported into a phase, the phase becomes locked.
* Start Dates are fixed once they fall into a closed period.
* Can only copy a phase if it contains no actual transactions or if the Phase Start Date is in a closed period.
* All relevant Timescale & Phasing functions will continue to be enabled until the Start Date is fixed when it falls into a closed period, at which point it becomes disabled.

## Project Start Date

Navigation: Home Ribbon>Timescale & Phasing>Timescale>Project Start Date Navigation: Home Ribbon>Timescale & Phasing>Start Date

When you start a new project, the current date from your PC is used to set the project start date. If this is not the date on which your project starts, you will need to specify a new start date.

1. In the Timescale & Phasing group on the Home tab, click the **Start Date** ellipsis button.
2. In the **Date Picker** field, choose a start date.

You can choose any start date from the **Date Picker** field – even if it is earlier than today’s date.

1. Click **OK**.
2. Result: The **Project Start Date Dependencies** window appears.

## Project Start Date Dependencies

When the project start date is changed, the program automatically adjusts the time scale of each of the phase dates, development stages, and all costs and revenue items within each phase. Before the project can be updated, the program needs to know whether to move items relative to their existing dates, or to keep them fixed so that they do not change. Dates like the Phase Start Date, Development Stage Dates, and Cash Flow Dates must all be adjusted.

The Project Start Date Dependencies allows you to specify how the dates will be changed.

* + You can make the dates automatically change relative to the project start date.
  + You can keep the same dates by adjusting lead in times. The following options are available:

### Adjust phase start date

Specify how phase start dates are updated.

Phase start dates

* + **Keep the same phase start dates:** The dates are not changed for any phases that start after the project start date. Any phases that start before the new project start date will be changed to start on the project start date.
  + **Keep the same lead in period from the project start date:** Changes each phase start date so that the same lead in period is maintained between the project start date and the phase start date.
  + **Make all phases start on the project start date:** Makes each phase start date the same as the project start date.

### Adjust phase timescale

Specify how all timing fields are updated. You can adjust a phase’s timing relative to a specific date, a specific period or the project start date.

The term items in each of the headings below is used to denote any of the following:

* + Development state dates
  + Dates for costs or revenues
  + Dates for contributions/repayments/mortgage in structured finance
  + Construction/Lease/Capitalisation Dates
  + Any other data that depends on choosing a date for its timing Items with manual period timing

If you have items that start on a specific period, choose from:

* + **Keep the same period:** Moving the data so that it starts on the same period.
  + **Change the period so that is keeps the same offset from the start of the phase:** Moving the data so that it starts on the same number of periods after the new phase start date.

Items with manual date timing

If you have items that start on a specific date, choose from:

* + **Keep the same date:** Moving the data so that it starts on the same date.
  + **Change the date so that it keeps the same offset from the start of the phase:** Moving the data so that its start date has the same lead in time from the new phase start date.

Items anchored to Project Start and End stages

If you have items that start on a specific development stage date, choose from:

* + **Keep the same offset from the project start or end:** Moving the data so that the same Offset period is maintained from the phase start date.
  + **Change the anchor so that it keeps the same offset from the start of the phase:** Moving the data so that its start date has the same Offset period from the development stage’s start date.

## Phase Start Date

Navigation: Home Ribbon>Timescale &Phasing>Timescale>Start Date>Ellipsis

When a phase start date is changed, the program automatically adjusts the time scale of each of the development stages and all costs and revenue items within each phase.

Before the project can be updated, the program needs to know whether to move the start date of each item relative to its current date or to keep the same start date so that the data does not move.

After changing the Phase Start date, the following options are available:

Specify how you want the phase time scale to be adjusted, using the controls in the Phase Timescale Adjustments section. Here, you can adjust the timing of each item within a phase.

The term ‘Items’ in each of the headings below is used to denote any of the following:

* + Development state dates
  + Dates for costs or revenues
  + Dates for contributions/repayments/mortgage in structured finance
  + Construction/Lease/Capitalisation Dates
  + Any other data that depends on choosing a date for its timing

Items timed to a specific period

If you have items that start on a specific period, choose from:

* + Moving the data so that it starts on the same period.
  + Moving the data so that it starts on the same number of periods after the new phase start date.

Items timed to a specific date

If you have items that start on a specific date, choose from:

* + Moving the data so that it starts on the same date.
  + Moving the data so that its start date has the same lead in time from the new phase start date.

Items timed relative to project dates

If you have items that start on a specific development stage date, choose from:

* + Moving the data so that the same Offset period is maintained from the phase start date.
  + Moving the data so that its start date has the same Offset period from the development stage’s start date.

## Phases

## Project and Phase Information

Navigation: Home Ribbon>Timescale & Phasing>Timescale>Phase Section

**Project Start Date:** The project start date is entered using the **Project Start Date** button on the Home tab. Use the **Date Picker** field to select the Month and Year in which the project starts. All dates are assumed to be the first of the month.

When you change the Project Start Date, the dates of all phases and tenant leases will be updated automatically. You will be asked to confirm whether you want them to be updated and options are available to specify how they will be changed.

**Phase Start Date:** The start date of a phase can be either the same, or later than, the project start date. Use the **Date Picker** ellipsis to change the phase start date to a later date.

**Phase Name:** Each phase may be given a name that identifies it in different parts of the application. Enter the name into the **Phase Name** field. The name you enter here will be shown on the Phase Tabs underneath the time scale stages table. It will also be shown on the Phase Tabs in the main application workspace. To ensure that the phase name appears on the phase tabs, check the Phase Names option on the Home tab.

**Phase Data Type:** Each phase can hold different types of information – either development costs and revenues, or infrastructure costs. The first phase in a project must always contain development costs and revenues. Any other phase, though, can hold either kind of information.

**Phase End Date:** Displays based on the timings entered for the Development Stages.

**Phase Reference:** Select a Phase Tab on the Timeline and type a Phase Reference Number, alpha-numeric and up to 15 characters.

* This field is locked once an invoice is allocated against the Phase Reference number.
* If a Phase Reference Number has been used in another phase an error message displays.

See Also Infrastructure Costs

To nominate a phase to hold development costs and revenues, select **Project Revenues and Costs.**

To nominate a phase to hold infrastructure costs, select **Infrastructure Costs Only.**

## Development Phases

Navigation: Home Ribbon>Definition>Timescale & Phasing>Add New Phase

### Creating Phases

New phases can be created either by adding, inserting, or copying an existing phase. If you use a template for creating new projects, it is possible to use the phase settings in the template to add or insert each new phase. If you choose not to create new phases from the template, a blank phase will be created instead.

To add a phase with default phase settings

In the Timescale and Phasing area, select the **Add New Phase** command on the Home tab.

Before adding a phase, ensure that the option to add phases with default settings is checked in the General tab within the Preferences area. Use the **Application** button to open the Preferences window, then check the **Add New Phases from Default Template** option.

To add a blank phase

In the Timescale and Phasing area, select the **Add New Phase** command on the Home tab.

Before adding a phase, ensure that the option to add phases with default settings is unchecked in the General tab within the Preferences area. Use the **Application** button to open the Preferences window, then check the **Add New Phases from Default Template** option.

To add an infrastructure cost phase

Select the **New Infrastructure** command on the Home tab.

Using this command is a shortcut way of adding a phase then selecting Infrastructure Costs Only from the **Phase Data Type** drop-down list.

To insert a new phase

To insert a new phase before an existing phase, click on the phase then select the

**Insert** command from the Home tab.

To insert the new phase with default phase settings already created, please review the topic [To add a phase with default phase settings](#_bookmark127).

To insert a blank new phase without default phase settings, please review the topic [To](#_bookmark128) [add a blank phase](#_bookmark128).

**Note:** If you have a licence for the Snapshot module and created an Original or Revised Budget, that data and structure is locked and you cannot insert a new phase between previously defined phases into the model for the related, current forecast. However, you can add a new phase after the last phase, previously defined in your model.

To copy a phase

Copying a phase is a quick way to replicate all the settings from the Timescale

Assumptions, Areas - Rent and Sales, Definitions, and Cash Flows. To make a copy of a phase follow the three simple steps below:

* Select the phase tab and click on the **Copy** command on the Home tab.
* Next, select where you would like the phase to be copied to - either over an existing phase or as a new phase.
* Finally, click the **OK** button.

Quick phase copy

You can quickly copy a phase to another phase by holding down the SHIFT key, clicking on a phase and dragging it over another phase. A red outline will appear around the target phase and you can release the mouse to make the copy.

## Deleting Phases

Navigation: Home Ribbon>Timescale and Phasing>Timescale>Phases>Delete

To permanently remove a phase from the project, use the **Delete** command. Select the tab of the phase you want to delete then select the **Delete** command on the Home tab.

When you delete a phase, all area records, cash flow lines, costs, fees, revenues, and so on are deleted. If you are deleting any phase other than the final phase, phases will be renumbered after the existing phase is removed.

If you delete the last remaining phase in the project, a default empty phase will be added automatically.

**Note:** If you have a licence for the Snapshot module and the phase(s) form part of your Original or Revised Budget, they cannot be deleted.

## Delete phase options

Sometimes a phase that you want to delete will be linked to other areas of the project. For example, the repayment dates or analysis dates within finance structures are linked to the phase.

When this happens, a confirmation window is shown that allows you to specify what happens next.

|  |  |
| --- | --- |
| **To** | **Do This** |
| Delete the contents of the phase but retain the phase in the list so that no data is changed in other areas | Select the option to **Delete the contents but retain the Phase** |
| Remove the phase and all its contents and update any dates that depend on this phase | Select the option to **Permanently delete the phase and all its contents** |

## Merging Phases

Navigation: Home Ribbon>Bottom Phase Tab Bar>Merged Phases Tab

Where you have more than one phase in a project, you will usually want to get a valuation for the combination of all phases. Merging the phases will create one large cash flow of all the costs and revenues from each phase. The finance will be recalculated to show the effect on interest costs. All Key Performance Indicators will be recalculated in the KPI Dashboard.

To merge phases, select the Merged Phases tab on the Phase Tab bar in the main application workspace.

**Note:** If you have a licence for the Snapshot module and the phase(s) form part of your Original or Revised Budget, they cannot be merged with other phases.

## Moving Phases

Navigation: Home Ribbon>Bottom Phase Toolbar>Click/Drag

The order in which phases are displayed in the project can be changed by clicking on to a phase and dragging it to either before or after any other phase on the Phase Tab bar. This can be done either within the Time Scale and Phasing area or in the main application workspace.

When you drag a phase to a different position, a red insertion marker shows where the phase can be moved to. When the red insertion marker is shown, you can release the mouse to drop the phase into its new position.

**Note:** After moving a phase, the residual land value may change if you are using a residual mode that targets a single land value at the start of the project.

**Note:** If you have a licence for the Snapshot module and the phase(s) form part of your Original or Revised Budget, the order of the phases cannot be changed by moving them.

## Grouping Phases

Navigation: Home Ribbon>Timescale>Groups

Grouping phases in different combinations is an easy way to organise a project into logical phase units either by use type, by development program, or for highest and best use analysis.

Groups

Select the **Groups** command from the Home tab.

### Project Phase Groups window

Add Group

Create a new project phase group by clicking **Add Group**. The All Phases group is created by default - it cannot be deleted, but its name can be changed.

Delete Group

Select the group then delete it by clicking **Delete Group**. All references to the group will be removed from the project.

Exclude

Include all phases from a phase group by clicking **Exclude**. Check marks will disappear from the Include column on the right.

Include

Include all phases from a phase group using the **Include** and **Exclude** commands from the tool bar. Check marks will appear in the Include column on the right.

Project Phase Group

Click and enter a name for the new phase group.

Extend Phase Length

Earlier versions of Developer automatically enabled interest to carry on calculating from the point at which the sale of the site took place at the end of the phase time scale until the end of the project. To maintain compatibility with these earlier versions and achieve the same results, use the **Extend Phase Length** option against a phase group. Leaving the box unchecked will terminate the interest calculations at the end of the phase time scale.

Phase Number

This column displays the phase number sequentially.

Phase Name

Enter a name for the phase.

Include

Check or uncheck these boxes to include or exclude the phase from the group. Click **OK** when you have completed your changes.

## Stages

## Development Stages

Navigation: Home Ribbon>Timescale & Phasing>Timescale

There are seven predefined stages of development that can be used to describe the time scale of a phase. Their order in the table follows the typical sequence of a development project. Each stage records its duration and start date, plus other information about how the stage is anchored to others.

Every cost and revenue entered into the project is automatically linked to the one of the stages defined in this area. If the start date or the duration of any stage is changed, all dependent costs and revenues will be automatically with new start dates and distributions.

Stages are linked together by default so that a change in one stage's duration automatically updates the others. The default setup is to have the timing run from purchase to sale, with each stage starting only after the previous one is completed.

Other stage linking possibilities include:

* Stages are linked, but you choose the order
* Stages can be unlinked and manually timed to any date in the time scale
* Stages can run concurrently

**Stage Name:** Each of the stages has a default name. You can change the name of any of the stages to suit your particular development. Changing the name, however, does not change the stage's purpose. To change a stage name, click into the **Development Stage** field and press F2 to edit.

**Stage Duration:** The duration of each stage is measured in months. You do not have to enter the duration for every stage. Where your project does not have a need for a stage, enter zero (0). The most commonly used stages are Pre-Construction, Construction, and Letting.

480 months (40 years) is the maximum allowable time for the following stages:

* Purchase
* Pre-construction
* Construction
* Post Development
* Letting
* Sales

840 months (70 years) is the maximum allowable for the Income Flow stage.

**Start Date:** The starting date for the development stage.

**End Date:** The ending date for the development stage.

## Entering the Stage Timescale

The time scale for a phase is entered by typing the duration of each stage into the timetable. When the lengths of each stage have been entered, you can modify how the stages are linked together. Stages can be modified using the keyboard, or by dragging bars around the time chart with the mouse.

To change the start date or duration of a stage

To change the start date of any stage using the keyboard, first show the Stage Anchors columns in the table by checking the **Stage Anchors** option on the Home tab.

|  |  |
| --- | --- |
| **To** | **Do This** |
| Change the Start Date. | Click the ellipsis button in the Start Date column and select a date from the Date Picker. |
| Unlink the stage and let it have its own start date. | Select **Fixed Date** from the Anchored To column. |
| Change the start date *and* unlink it from other stages. | Click on the left end of a time bar and drag either to the left or the right. |
| Keep the start date but change the duration without affecting other stages. | Click on the right end of a time bar and drag either to the left or the right. |
| Change the start date and duration without affecting other stages. | Hold down the SHIFT key, click on the left end of a time bar and drag either to the left or the right. |
| Change the start date but keep the duration and update any linked stages. | Hold down the SHIFT key, click into the middle of a time bar and drag either to the left or the right. |
| Change the start date but keep the duration without affecting any other stages. | Click into the middle of a time bar and drag to the left or to the right. |

To change the way stages are linked Click into the chart part of the timetable

|  |  |
| --- | --- |
| **To** | **Do This** |
| Make a stage's timing depend on another stage. | Select the stage you want to link to from the Anchored To column. |
| Make a stage start when another stage starts. | Select Start from the Align column. |
| Make a stage start when another stage ends. | Select End from the Align column. |
| Enter a lag between the start of a stage and the start or the end of another stage. | Enter the number of months lag in the Offset column. |
| Make a stage start before another stage ends. | Link the stages using the Anchored To column, select End from the Align column and enter the months as a negative number in the Offset column. |

To reset the linking between all stages

To remove all changes to the linking, alignment and lags between stages, click the **Reset** command on the Home tab. The **Reset** command removes all manual changes and resets each stage to an end-to-end alignment as show in the illustration below.

To auto-calculate Construction and Sales stages

For residential projects, it is useful to make Developer calculate automatically the length of the construction and sales stages. The length of the Construction stage is calculated from the number of Construction Starts per Month and the length of each construction period. The length of the Sales stage is calculated from the sales velocity and period to completion from the sales schedules.

Select the **Auto Adjust Stage Timing** option on the Home tab to make Developer calculate the stage lengths. When this option is checked, the Construction and Sales stages are locked to prevent any manual changes to the start date or duration.

To change the scale of the stages chart

You can zoom in or out to show more or less stage chart data by changing the Time line Scale.

To show all stages over the entire phase, select Scale to Fit.

To show other views that zoom in on the detail, select from Monthly, Quarterly, Semi- Annual, or Annual.

## Dependencies

Navigation: Home Ribbon>Timescale and Phasing>Timescale

The powerful Timescale and Phasing function allows you to create phase or stage dependencies. A dependency occurs when the start of one phase or stage depends upon the start or finish of another. Most stages are dependent upon other stages unless you insert fixed stage dates. You can easily make changes to one stage and immediately see the effect it has on the land value and calculated results.

## Linking Phases and Stages

When linking phases, you can specify different types of dependencies. There are several types of dependency used for linking phases:

* Lag from Project Start Date
* Finish to Start, which means that the predecessor phase must finish before the successor phase can start
* Finish to Start (Stage) which means that the predecessor stage must finish before the successor phase can start

As you set dependencies and dates, Developer adjusts the time scale and any time- based data that you have entered into the project.

## Phase Dependencies

Navigation: Home Ribbon>Timescale

Phase dependencies can be set for all phases other than the first phase in the project. The first phase always starts on the project start date.

To enter a dependency

1. In the **Phase Start Date** field, click on the ellipsis
2. In the drop-down list of the **Phase** field, select the phase that you want to depend upon
3. In the drop-down list of the **Stage** field, select the stage that you want to depend upon
4. In the **Stage** field, select Start or End
5. In the **Offset by** field select an additional lead in (negative number) or lag (positive number)
6. Click the **OK** button

**Note:** You cannot enter a number of months in the **Offset by** field if you have chosen the stage *Phase Start*.

To set a fixed phase start date

A fixed date can be set for all phases other than the first phase in the project. The first phase always starts on the project start date.

To enter a fixed start date, use the following method:

1. In the **Phase Start Date** field, click on the ellipsis
2. Under the **Date** field, click the date picker and select the date.

To make a phase start when another phase finishes

To set a phase to start when another phase finishes, use the following method:

1. In the **Phase Start Date** field, click on the ellipsis
2. In the drop-down list of the **Phase** field, select the phase that you want to depend upon
3. In the drop-down list of the **Stage** field, select the Sales stage
4. Under the **Stage** field, select End
5. Click the **OK** button

## Stage Dependencies

Navigation: Home Ribbon>Timescale & Phasing>Timescale>Anchored To

Stage dependencies can be set for all stages in a phase, although the first stage,

*Purchase*, can be dependent only on the Phase Start or a Fixed Date.

## To set stage dependencies

1. If you can't see the Anchored To, Align, or Offset columns, check the **Stage Anchors** option on the Home tab
2. Select the stage that is dependent on another
3. In the Anchored To column, select the stage that this stage is dependent upon
4. in the Align column, select whether this stage is dependent upon the Start or End of the other stage
5. In Offset, select an additional lead in (negative number) or lag (positive number)
6. Click the **OK** button

## To set a fixed stage start date

1. In the Start Date column, click on the ellipsis
2. In the date picker, select the Month and Year
3. Click the **OK** button

## To make a stage start when another stage finishes

1. In the Anchored To column, select the stage that this stage is dependent upon
2. In the Align column, select the End option

## To make a stage start when another stage starts

1. In the Anchored To column, select the stage that this stage is dependent upon
2. In the Align column, select the Start option.

## To make a stage start when a stage in another phase finishes or starts

1. Select the Extended Timing option on the Home tab
2. Under the Anchored To column, click the ellipsis
3. In the drop-down list, the **Phase** field, select the phase that you want to depend upon
4. In the drop-down list of the **Stage** field, select the stage that you want to depend upon
5. Under Stage, select the Start or End option
6. In the **Offset by** field, select an additional lead in (negative number) or lag (positive number)
7. Click the **OK** button

## To enter a lead in or lag between stages

In the Offset column, enter a lead in period as a negative number or a lag as a positive number

## Creating Dependencies between Phases and Stages

Navigation: Home Ribbon>Timescale and Phasing>Timescale>Phases

The powerful Timescale and Phasing function allows you to create phase or stage dependencies. A dependency occurs when the start of one phase or stage depends upon the start or finish of another. Most stages are dependent upon other stages unless you insert fixed stage dates. You can easily make changes to one stage and immediately see the effect it has on the land value and calculated results.

Linking Phases and Stages

When linking phases, you can specify different types of dependencies. There are several types of dependency used for linking phases:

* Lag from Project Start Date
* Finish to Start, which means that the predecessor phase must finish before the successor phase can start
* Finish to Start (Stage) which means that the predecessor stage must finish before the successor phase can start

As you set dependencies and dates, Developer adjusts the time scale and any time- based data that you have entered into the project.

To set phase dependencies

Phase dependencies can be set for all phases other than the first phase in the project. The first phase always starts on the project start date.

To enter a dependency, use the following method:

1. In the **Phase Start Date** field, click on the ellipsis
2. In the **Phase** drop-down, select the phase that you want to depend upon
3. In the **Stage** name drop-down, select the stage that you want to depend upon
4. Under **Stage**, select Start or End
5. In **Offset by**, select an additional lead in (negative number) or lag (positive number)
6. Click the **OK** button

Note: You cannot enter a number of months in the **Offset by** field if you have chosen the stage Phase Start.

To set a fixed phase start date

A fixed date can be set for all phases other than the first phase in the project. The first phase always starts on the project start date.

To enter a fixed start date, use the following method:

1. In the **Phase Start Date** field, click on the ellipsis
2. Under **Date**, click the date picker and select the date.

To make a phase start when another phase finishes

To set a phase to start when another phase finishes, use the following method:

1. In the **Phase Start Date** field, click on the ellipsis
2. In the **Phase** drop-down, select the phase that you want to depend upon
3. In the **Stage** name drop-down, select the sales stage
4. Under **Stage**, select End
5. Click the **OK** button

To set stage dependencies

Stage dependencies can be set for all stages in a phase, although the first stage, Purchase, can be dependent only on the Phase Start or a Fixed Date.

To set stage dependencies, use the following method:

1. If you can't see the Anchored To, Align, or Offset columns, check the **Stage Anchors** option on the Home tab
2. Select the stage that is dependent on another
3. In the Anchored To column, select the stage that this stage is dependent upon
4. in the Align column, select whether this stage is dependent upon the Start or End of the other stage
5. In Offset, select an additional lead in (negative number) or lag (positive number)
6. Click the **OK** button

To set a fixed stage start date

1. In the Start Date column, click on the ellipsis
2. In the date picker, select the Month and Year
3. Click the **OK** button

To make a stage start when another stage finishes

1. In the Anchored To column, select the stage that this stage is dependent upon
2. In the Align column, select End

To make a stage start when another stage starts

1. In the Anchored To column, select the stage that this stage is dependent upon
2. In the Align column, select Start

To make a stage start when a stage in another phase finishes or starts

1. Select the **Extended Timing** option on the Home tab
2. Under the Anchored To column, click the ellipsis
3. In the **Phase** drop-down, select the phase that you want to depend upon
4. In the **Stage** name drop-down, select the stage that you want to depend upon
5. Under **Stage**, select Start or End
6. In **Offset by**, select an additional lead in (negative number) or lag (positive number)
7. Click the **OK** button

To enter a lead in or lag between stages

In the Offset column, enter a lead in period as a negative number or a lag as a positive number

## Validation

Changes to the time scale and phasing are instantly reflected in all parts of the project. All time-based information in the area schedules, cash flow, finance structures, and sensitivity analysis is updated. These changes are then validated to ensure that the timings of any manually overridden items do not fall outside the bounds of the newly changed time scale. To ensure that manually timed items are identified, a validation check is undertaken after each change to the time scale and phasing.

Changes that cause the project to be reorganised are:

* + Changing the project start date
  + Changing the phase start date
  + Shortening the duration of a stage
  + Moving a stage
  + Unlinking a phase
  + Copying or deleting a phase Causes of invalid timing are:
  + An item starts before the project start date
  + An item starts before the phase start date
  + An item starts after the phase end date
  + An item starts within the phase, but ends after the phase
  + An offset is greater than the length of its parent stage

If invalid timing is detected, a warning is shown with options to correct the situation. A tab named Validations is shown at the foot of the window. Follow the hyperlinks to make corrections to the timing of any items listed.

## Reporting

## Timescale and Phasing Graph Report

Navigation: Home Ribbon>Timescale & Phasing>Timescale>Project Timescale

A report is available that shows each of the phases in a project as a bar chart, similar to the ones on the Timescale and Phasing screen. All phases are included in the report and a Merged Phases graph can also be shown.

Options to control the content and format of this report can be found on the report content within the Page Setup area of the Report Preview area in the main application workspace. When you preview or print from the Timescale and phasing area, these options will be used to produce the report.

To preview the report before printing, select the **Preview Report** command on the Home tab.

To send the report directly to the printer, select the **Print Report** command on the Home tab.

# Structured Finance

Navigation: Home Ribbon>Finance Type>Structured Finance

## Purpose

The Structured Finance functionality is a separate module of the Developer program. It may or may not be available depending on the contract entered into by the user. The module can be activated later if it is not currently available. This can be done without the need to upgrade the software but using a licence key that enables the module. This ensures that Structured Financing can be switched on quickly.

The Structured Finance module allows you to quickly model the finance component of real estate projects or portions of projects (down to an individual line item) you have created in ARGUS Developer. An unlimited number of project participants and loans can be set up in the Structured Finance module. The Structured Finance module takes the project cash flow and creates a finance cash flow based on the ordered contributions, repayments, mortgages (single or multiple), and profit distribution of the funding sources. Multiple user-defined finance structures may be created, each with its own self- contained setup of funding sources, funding structures, finance rates, finance fees, mortgage and profit distribution.

## Functionality

The Structured Finance module offers the following capabilities:

1. Creation of multiple sources of funds from:
   * Individual lender(s)
   * Individual equity participant(s)
   * Take out loans on an interest-only basis, reverting to capital and interest repayments on a specified date
2. Creation of multiple finance structures:
   * Separate finance settings for each phase, or group of phases
   * Separate mortgage(s) for each phase, or group of phases
   * Cash flow that combines all finance structures
3. Creation of cost groups:
   * Using one or more cost rows.
   * Assign and allocate a funding source to a cost group.
4. Repayments of capital:
   * Delay the repayment of capital and loans using the earliest repayment date
   * Repay capital and loans in full on a specific date
5. Mortgage takeout financing:
   * Take out any number of mortgages in each financing structure
   * Select the basis on which each mortgage can be calculated independently of any other
   * Selection of income stabilisation date
   * Specify the tenants/properties used to finance the mortgage repayments
   * Calculates maximum mortgage available based on project income
   * Calculates debt service ratio
   * Calculates the mortgage based on a target debt service cover ratio (DSCR)
   * Calculates the annual income from the sum of net operating income over the first twelve months of the mortgage
   * Shortfalls in mortgage payments picked up by any finance source
6. Powerful waterfall profit distribution capabilities:
   * Preferred return calculations
   * Fixed amount distributions
   * IRR look-back and promote interests
   * Equity multiples
   * Catch-up payments to general partner
   * Percentage distributions
   * "Clawback" mechanism to redistribute general partner's profit when the preferred return or other hurdle rate has not been met for the other equity investors
   * Taxation of profit
   * Performance measures
7. Creation of a Finance cash flow for each finance structure that shows contributions, repayments and profit participation for each Finance source, based upon the project cash flow and the finance structuring assumptions made in the Finance module.
8. Fine-tuning the cash requirements ("Contributions") and receipts ("Repayments") for each individual source of funds through the "Timed Contributions" and "Timed Repayment" features in the Finance Cash Flow. This feature allows you to time project contributions and repayments, in addition to the "Auto" generated Contributions and Repayments that are generated by ARGUS Developer, based on the project's costs and revenues.
9. The Finance cash flow has a Balancing Account that acts as an overdraft account if you specify contribution limits for debt or equity - this shows the amount of finance shortfall in the finance structure.
10. Balances between equity partners and loans can be transferred which allows inter-partner and inter-loan payments and repayments - for example, a construction loan can take over the balance of pre-development costs from an equity partner. Formerly called Timed Finance Events Transactions, these are now referred to as Inter-Source Transactions and are structured for easier setup and maintenance.
11. Monitor loan drawn down where fixed contributions have been based on a loan to value or loan to cost ratio.

See Also

[Finance Structures Screen](#_bookmark156) [Finance Structures Table](#_bookmark157) [Finance Phase Groups](#_bookmark158) [Sources Tab](#_bookmark159)

[Financing Tab](#_bookmark160)

* + [Cost Groups](#_bookmark162)
  + [Revenue Groups](#_bookmark164)
  + [Line Item Finance](#_bookmark163)
  + [Loan Ratio](#_bookmark165) [Repayments Tab](#_bookmark168)

[Inter-Source Transactions Tab](#_bookmark169) [Finance Rates Tab](#_bookmark170)

[Finance Fees](#_bookmark172) [General Tab](#_bookmark173) [Mortgages](#_bookmark174)

[Profit Distribution Tab](#_bookmark175)

The Structured Finance Module offers the following features:

1. It is an integral part of the software, so that changes to project cash flows and results are instantly reflected in all elements of the Finance calculations.
2. It provides an extremely fast way to model deal structures that include multiple equity sources, multiple loans during construction, and long-term (takeout) amortising mortgages.
3. Each participant (whether an equity source of funds or a loan) in a finance structure has the following contribution elements that can be set by the user:
   * Order of Contribution
   * Assign to a user defined cost group (specific line item rows in the model)
   * Contribution as a percentage of Total Cost
   * Fixed Contribution Amount
   * Define a fixed contribution based on a loan to value or loan to cost ratio
   * Maximum Contribution Amount
   * Timed Contribution amounts at specific dates
4. Each Participant (whether an Equity source of Funds or a Loan) in a finance structure has the following repayment elements that can be set by the user:
   * Order of repayment;
   * Timed repayment amounts at specific dates;
   * For both equity and debt sources, timed repayments of profit at specific dates - this provides accurate simulation of preferred returns;
   * Control over the first date at which Repayments of any kind (of original contributions or profit that is automatically calculated) are paid for any equity source.
5. A conventional amortising mortgage loan can be set up for each finance structure. A mortgage can be defined with a variety of parameters for calculation of amount, interest compounding frequency, or amortisation period. For more information see [Mortgage Tab](#_bookmark174).

A sample file is included with the installation of ARGUS Developer. It shows how the various features of Structured Finance are applied and how the results are generated.

## Assumptions Setup

If the Structured Finance module has not been enabled, select the **Finance Type** button from the Finance tab group on the ribbon, then select Structured Finance in the drop- down list.

**Note:** The Basic (Interest Sets) option is the traditional single-source financing module.

## Finance Structures

Before you start to work with Finance Structures, think about how you want the different parts of your project to be financed. Next split those parts into different phases of development using the Timescale and Phasing window. You will then be able to clearly identify, for example, which phases will be financed by which finance sources, at what rates of interest etc. Once you have identified which parts of the project will be financed by different funding sources, you can create a finance structure for each part, then add the funding detail.

The detail that you add to each structure can include separate sources of debt and equity financing, separate interest rates and loan fees, mortgages, and waterfall profit distributions. In this way, it is an easy task to finance the different buildings on a site with completely separate funding structures.

Individual Finance Structures may be added together to provide a combined view of all finance source cash flows and performance measures across the project. The result of the combination is a cash flow that shows each source's participation in the different finance structures. Each source's performance measures are also calculated from their combined cash flows to give an overall project return per source.

### The Finance Structures Screen

The Structured Finance setup screen is divided into two areas. The top area of the screen is used to create the Finance Structure that will finance the relevant phase(s) of data. The bottom area of the screen is used to create and edit the detailed funding information for each of the finance structures. Adjust the height of each area by clicking on the resizing bar between the two areas and dragging the screen up or down.

### The Ribbon Bar

Use the Ribbon Bar to add, delete, or copy line items.

Finance Structures

The Finance Structures section controls the top area of the window.

|  |  |  |
| --- | --- | --- |
| **But ton** | **Description** | **Notes** |
| New | 1. Click to add a new finance structure. 2. Result: A finance structure creates automatically and is added to the Structures table. 3. Rename the structure to help easily identify when you are in the main application area or on reports. 4. Enter the funding information into the appropriate tabs in the lower part of the screen. | The Finance Phase Group is automatically set to (None) and the **Active** option is selected when creating new finance structures.  When you close the Finance Setup window, Developer adds the Finance Phase Group / Finance Structure name to Phase Group selector in the bottom left of the main application area. By selecting this phase group, you can see the results of the finance calculations for that finance structure. |
| Copy | Click to copy the selected finance structure. | The copy contains all settings made in the source finance structure, with the exception of the Finance Phase Group and any date and timing information.  The Finance Phase Group is set to (None) to prevent any double- counting of the phase data in a combined cash flow view.  Because each finance structure must work with a unique Finance Phase Group, and the copy has automatically set the Finance Phase Group to (None), any date and timing fields that depend on specific phase numbers must be reset to link to the project start date. This means that the timings of the following settings may change:   * Earliest Contribution Date * Earliest Repayment Date * Fixed Repayment Date * Interest-only Repayment End Date |

|  |  |  |
| --- | --- | --- |
| **But ton** | **Description** | **Notes** |
|  |  | * Inter-source Transaction Date * Stabilised Income Month for Ratio Analysis * Earliest Capital/Earliest Profit Distribution Month * Month to place Mortgage * Month to start Amortisation * Month to repay mortgage * Clawback month * Finance fee start date * Finance fee end date   Any Unit Sales Repayment settings also change because they are linked to the units within the phases inside the original Finance Phase Group. Any rates that are entered set to zero. |
| Delete | 1. Click to delete the selected finance structure. 2. Result: A prompt appears to confirm whether you want to delete the structure. 3. Click Yes to delete the structure.   Result: All data related to the structure deletes from the table and from the Phase Group selector in the bottom left of the main application area. | You cannot delete All Phases Structure.  A Finance Phase Group linked to the deleted structure can now link to another structure, or its phases moved into other Finance Phase Groups. |
| Phase Groups | Click to open the Finance Phase Groups window. | Phase Groups are used to link phases of data to a finance structure. You can select a Finance Phase Group only once with the exception of the All Phases group.  The All Phases group can be linked to multiple finance structures to enable scenario modelling where you can run different funding structure calculations against the entire project.  See also, [Finance Phase Groups](#_bookmark158). |

|  |  |  |
| --- | --- | --- |
| **But ton** | **Description** | **Notes** |
| Cost Groups | Click to add groups of costs for line item financing. | See also, [Cost Groups](#_bookmark162). |
| Revenue Groups | Click to add groups of revenues for line item financing. | See also, [Revenue Groups](#_bookmark164). |

Editors

The Editors section controls the bottom area of the window.

|  |  |  |
| --- | --- | --- |
| **Button** | **Description** | **Notes** |
| New | Click to add a new line item for the selected tab. | You cannot add new line items for Repayments or General tabs. |
| Copy | Click to copy the selected line item. | You cannot copy line items for Repayments or General tabs and you can only copy one line item at a time.  Dates are not reset to default values after copying. |
| Delete | Click to delete the selected line item. | You cannot copy line items for Repayments or General tabs. |
| New (smaller icon) | Click to add a new line item for the selected Fee Set. | This button only applies to the Finance Fees tab. |
| Copy (smaller icon) | Click to copy the selected line item inside a Fee Set. | This button only applies to the Finance Fees tab details and you can only copy one line item at a time.  Dates are not reset to default values after copying. |
| Delete (smaller icon) | Click to delete the selected line item inside a Fee Set. | This button only applies to the Finance Fees tab. |
| Move Up | Click to move the selected line item up in the input grid. | You cannot move the line items in the Finance Rates, Finance Fees, and General tabs. |
| Move Down | Click to move the selected line item down in the input grid. | You cannot move the line items in the Finance Rates, Finance Fees, and General tabs. |

Reports

|  |  |  |
| --- | --- | --- |
| **Button** | **Description** | **Notes** |
| All Sources | Click to view or print the Funding Source Cash Flow report. | See also, [Reporting](#_bookmark184) [Structured Finance](#_bookmark184) |
| Current Source | Click to view or print a report of the selected funding source. |  |
| Data Inputs | Click to select an area to view or print a report of your data inputs. |  |
| * Financing * Repayments * Inter-Source Transactions * Profit Distribution * All Schedules |

Finance Rates

Click the **Finance Rates** button to open the Finance Rates window. See also, [Finance](#_bookmark171) [Rates](#_bookmark171).

### The Finance Structures Table

When you open a file that was created prior to Version 5, you will see that there are already two structures listed in the table.

The first structure in the table holds the finance information created in the Finance Setup area in prior versions of Developer. The finance structure is called All Project Phases and the finance phase group that holds the list of all phases will be called All Phases.

The second finance structure is created automatically and named Default Finance Structure. It contains a default setup of all phases in the project. This structure can be used for simple financing where the project has a single phase or the same financing structure is to be used for all phases.

When you move between the different structures, either using the mouse, or the keyboard, the information in the lower part of the screen will update to reflect the settings held in the highlighted structure. The exception to this is the information on the Sources tab which is used in all finance structures.

Active

To include a finance structure in the combined view of all active finance structures, select the **Active** option. Any finance structure in which the **Active** option is not selected will not be included in the combined view, although it will be listed in the phase group selector in the main application area.

### Finance Phase Groups

Each finance structure can be used to finance one or more phases of data. To link phases to a finance structure, you will need to create Finance Phase Groups to hold the list of required phases.

Before adding new finance structures to the project, create the Finance Phase Groups that will be used for providing cash flow data to the finance calculations. Name each Finance Phase Group clearly so that it can be easily identified on other screens.

To create and maintain Finance Phase Groups, use the **Phase Groups** button on the Finance Structures ribbon.

Allow a phase to appear in multiple Finance Phase Groups (bottom of screen)

Select this box to finance different combinations of phases when determining the highest and best use for a site. When this option is selected, a phase may be included in more than one Finance Phase Group. It will not be possible to view the All Active Structures combined cash flow view when the phase has been included in more than once finance structure. This is to prevent double-counting the phase.

If you select the All Active Structures phase group in the main application area when phases are included in more than one finance structure, a warning similar to that shown below will appear and the current phase group selection is maintained.

When the **Allow the same phase to appear in multiple Finance Phase Groups** option is not selected, a phase may be included only once in any Finance Phase Group that is being used by an active finance structure. If you attempt to include the phase twice, the selection will not be allowed and a warning will be shown.

### Sources Tab

On this page, you can create any number of sources to participate in a Finance definition. Within the context of ARGUS Developer, sources include:

Equity Sources

Provide funds to the project and typically participate in profit distribution. Equity sources often have various preferred return profit distribution options.

Equity GP Sources

Manage the investment activity and typically will receive a management fee. In addition, may contribute funds and participate in profit distribution.

Debt Sources

Provide funds to the project in the form of interest bearing loans. Typically, these are repaid with the return of loan principal and accrued interest, but they can also participate in profits.

Balancing Account

This is a default source which is always part of a finance definition. The balancing account is used to provide money to a project when all the money from other sources is spent. The balancing account is also the holder of any undistributed profit during the project.

**Note:** The sources of financing entered here are available to all finance structures set up within the project.

When you enter sources of funds, you only need to set up each source once even if the source has multiple contributions or levels of profit participation. The ribbon includes the following buttons that are relevant to the Sources tab:

* **New:** Click the **New** button in the Editors group to add a new source which can then be named. For each source, select the type (Equity, Equity GP, or Debt) with the drop-down selector. This type selection is used to separate interest paid to equity and debt on the Summary.
* **Delete:** Click the **Delete** button in the Editors group to delete the currently highlighted source. You are requested to confirm this action before proceeding.
* **Move Up/Move Down:** Click the **Move Up** and **Move Down** buttons to re-order sources in the list.

### Financing Tab

The individual columns in the screen below are grouped into three main sections, left to right:

* [Sources](#_bookmark159)
* [Contributions](#_bookmark161)
* [Finance Costs](#_bookmark167)

Column Selection

1. Click (top left of tab).
2. Result: Pick list of column name check boxes appears.
3. Check the columns to display.
4. Result: Only the columns selected display.
5. Note: You can also select columns on the Repayments and Mortgages tabs. See Also

Quick Reference - Line Item Finance Sources

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
| Source of Funds | Text: drop- down selector | Available choices are from the Sources tab, as explained above.  This identifies the source on screens and reports. Note that the Balancing Account is always entered for you and cannot be removed; it is a necessary part of the analysis and always appears on the last line.  Each source listed in the Sources tab can be referred to more than once in the Financing and Profit Distribution tabs, depending upon the Contribution, Repayment and Profit allocations of your current project. Each line in this column must have a source attached. |
| Source Type | Text | This is the source type— either Debt, Equity, or Equity GP, as defined on the Sources tab. |

Contributions

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
| Order | Integer | The order in which each source contributes to the project. A Contribution Order can be shared between any number of finance sources. Individual finance sources can be referenced repeatedly in this list, each with a different contribution order, as required. This allows multiple sources to be in the same order, for example, the first 20% of project costs can be funded by two equity sources, and the remaining 80% by a construction loan. Another term for contribution order is "Tranche."  The Balancing Account is always the highest (largest) number — always the last source to contribute. It will only contribute when the project is  under-financed - in other words, there are more costs in the project cash flow than financing sources |

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
|  |  | contributions defined. This is an error condition that you must correct.  The actual timing of contributions is triggered by the project's need for funds, the contribution order of the current finance source line, and is further subject to any timed contributions entries that can be entered in the main Finance Cash Flow view that appears for each finance source. |
| Cost Group | Text: Drop- down selector | Available choices are from the Cost Groups setup.  This identifies which cost group the selected source of funds will contribute to.  See [Cost Groups](#_bookmark162) for further explanation of this field. |
| Contribution  % of Cost | Direct entry as percentage | The amount to be contributed expressed as a percentage of total development costs or a selected cost group. If other finance sources have the same contribution order, the actual amount contributed in any month will be split evenly between sources unless the **Proportionate** switch is selected, in which case the Proportion is relative to the % each source is contributing within the current contribution order. You cannot exceed 100% in a Contribution Order.  Note: You cannot exceed 100%, if you have multiple sources contributing to the same cost group.  Note: The Balancing Account still picks up any shortfall but will not express this as a % if cost group contributions are applied. |
| Contribution Cap | Amount | If entered, this is the maximum that a source will contribute when Contribution % of Cost is entered. |
| Fixed Contribution | Amount | This is the amount the source will contribute. If entered, cancels any % Contribution and Contribution Cap amounts.  Note: The maximum amount can also be calculated using the Loan Ratio popup.  See [Loan Ratio](#_bookmark165) for further explanation. |
| Contribution Shortfall % | Direct entry as percentage | This field provides a way to identify which sources will fund shortfalls in contribution or mortgage repayments as the project proceeds.  See [Contribution Shortfall %](#_bookmark166) for further explanation of this field. |

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
| Contribution includes interest | Select on or off | If **not** selected, this option adds the interest to the contributions without testing to see if the total amount being contributed exceeds the user- specified amount or percentage of cost. This is the default setting.  If **On**, it includes the interest payable on the loan in the total amount contributed by the current row's finance source. It has the effect of reducing the current finance source's total amount contributed to the project by the amount of interest payable on the loan.  Note: If **On** is selected, especially for large and complex multi-phase projects, it may impact calculation performance. |
| Proportionate | Select on or off | If **On**, determines the contributions for all finance sources in the current order to be in proportion to one another, based upon the Contribution % of Cost item above.  If **Off**, the amount contributed in any month for finance sources in this order will be split evenly between the sources, irrespective of their % contributions. Another term for proportionate contributions is Pari Passu. |
| Earliest Contribution Date | Selection with timing window | Specifies the earliest date of contribution to be made by the source. Click the ellipsis button to delay the start of contributions.  **Note:** If you delay the start of contribution by a source, and other sources have already fully contributed, the balancing account will have to pick up the shortfall.  If you delay the start of contributions by a source that is not the highest-ordered source for contributions, the program will look to the other higher-ordered sources for the contribution. |
| Deposit Contribution Multiple | Number | Specifies how much debt vs. deposits to use to fund your project. Note: Deposit Contribution Multiple only applies when you have modeled debt financing.  Example - Deposit Contribution Multiple is 1  The system funds the project in a 1:1 debt to deposits ratio, i.e. 50% debt and 50% deposits.  Example - Deposit Contribution Multiple is 4  The system funds the project in a 4:1 debt to deposits ratio, i.e. 80% debt and 20% deposits. |

Cost Groups

To enable a source of funding to contribute to a particular line item(s) in the model, a cost group is created. By default, Development Costs group containing all the line items is selected.

Rules for creating Cost Groups:

* A line item can only be used once for a group.
* Unassigned line items remain in the default Development Cost group.
* If a line item is added to the Project Cash Flow, it must be assigned to the cost group or else it remains in the Development Cost group.
* When a line item is removed from the Project Cash Flow, it is automatically removed from the Cost Group.

Line Item Finance

To set up a specific contribution amount to a specific cost group. For example, 10 million out of 20 million for land.

Set Up Line Item Finance - Cost Group

1. Click the Sources tab.
2. Click **New** in the Ribbon.

Option: Right click and select **New** in the pick list.

1. Type the new structure name.
2. Type the source of funds name.
3. Select the source type.
4. Click the Financing tab.
5. Click **New** in the Ribbon.
6. Select the newly created line item in the source of funds pick list.
7. Type the contribution order.
8. Click **Cost Groups** in the Ribbon.

Result: The Structured Finance Cost Groups popup appears.

1. Click **Add New Group**.

Result: By default, the new group is named Development Costs and holds all the line items in the model.

1. Type a name and click **OK**.
2. Select the relevant cost group.
3. Select the line item(s) you want to add to your newly created group.
4. Option: Click **Add All** to add all the line items in the cost code group to your new group.
5. Click **Add Selected**.
6. Option: Right click and choose Add Selected from the pick list..
7. Result: Line items are added to the new group.
8. Note: Line items can only be included in one group for your project. Therefore, once you move line items to your new group, those line items are no longer included in the former group.
9. Click **OK**.

Result: Your new cost group is available for selection in the **Cost Group** pick list. The source of funds you selected now only funds line items included in the specified cost code group.

1. Type a percentage for the **Contribution % of Cost**. For example, 100% funds all of the costs for that cost group.

Option: Set up multiple sources of funds for the same cost code group by selecting the cost code group and typing the remaining percentage for Contribution % of cost.

1. Note: The total contribution % of cost for any single cost code group cannot exceed 100%. If you use multiple sources with the same contribution order to fund a cost group and multiple sources with different contribution orders to fund the same cost group, you can input any value for the Contribution % of Cost (this value is independent of the previous input for that group). Validation prevents the total value of the cost group from being exceeded.

Note: The Balancing Account is hidden when you use cost code groups and allocate percentages of equity to them.

Revenue Groups

To enable a source of funding to be repaid by a particular revenue/income line item(s) in the model, you can create a Revenue group. By default, the system selects the All Revenue group, which includes all revenue/income line items.

Set Up Line Item Finance - Revenue Groups

1. Go to Ribbon>Budget>Finance Cash Flow>Right Click on a Line Item>Finance Structures>Ribbon>Revenue Groups.

Result: The Structured Finance Revenue Groups popup appears.

1. Click **Create a Group** in the Ribbon. Result: The Group Name popup appears.
2. Type a **new group name** and click **OK**. Result: The popup disappears.
3. Select an option:
   * Add All
   * Add Selected
   * Remove Selected
   * Remove All
4. Click **OK** to apply your changes.

Option: Select a group by name in the **Group** pick list in the top left corner. Note: You can apply the Repayment Groups in the Structured Finance>Repayments tab.

You can view changes based in the **Finance Cash Flow>Revenue Groups** section.

Loan Ratio

When a developer is seeking debt funding or a lender is assessing the borrowing requirement, it is possible to calculate the loan advanced on the following bases:

* + % of Gross Development Value
  + % of Net Development Value
  + % of Total Costs – optionally less Sales Fees

Note: The loan is advanced as a fixed contribution and can be monitored using a new chart on the Reports drop down menu on the main application ribbon bar.

Procedure

To calculate a loan advance in terms of key loan ratios, follow this procedure:

1. Click on the **Fixed Contribution** ellipsis button.
2. Result: Loan Ratio popup appears.
3. Select a calculation basis:
   * GDV
   * NDV
   * Loan to Cost
4. Select **Exclude Sales Fees** to exclude any sales fees from the loan total.
5. Type a **Loan Ratio**.
6. Result: The **Loan** amount updates.
7. Click **OK**.
8. Result: Updated Loan Amount line displays in the Fixed Contribution column of the Finance Cash Flow.

Earliest Contribution Date

To delay the date upon which a source makes contributions, click on the **Earliest Contribution Date** button.

In addition, you may choose to link the earliest contribution date to another source's Loan Repayment Date. Choose **Loan Repayment** option in the drop-down list of the **Stage** field and then select the name of the source in the drop-down list in the **Source** field in the Financing Source section.

Contribution Shortfall %

Where there are Contribution Caps or Fixed Contributions entered, a shortfall may result.

The **Contribution Shortfall %** field provides a way to identify which sources will fund shortfalls in contributions or mortgage repayments as the project proceeds.

A contribution shortfall will be funded in whole or in part by sources that are identified as being contributors to a shortfall, which could occur at any point in a project. Shortfalls will be funded in the percentage amount for each source identified as being a contributor, irrespective of their order of contribution - in other words, a source could commence funding prior to the time it would have otherwise, had it not been a shortfall contributor.

It is not necessary to enter a total of 100% (or any % for that matter) in the **Contribution Shortfall %** column. Thus, if a shortfall is not 100% funded, the balance will fall to the Balancing Account.

**Note:** You are not permitted to provide in excess of 100% Shortfall Funding.

Shortfalls are added, with interest if specified for the source, to the balance of the source and will be repaid in the Order of Repayment along with Auto and Manual Contributions, without discriminating among the type of contributions.

You may find it is easier to add a new contribution row to handle shortfalls. In this way, you can see the amount of the shortfall in a separate cash flow, together with any interest and repayments. You also have the advantage of being able to manually time any repayments on the shortfall. The shortfall cash flow will be consolidated along with the other cash flows for the same source when you choose a consolidated view on the Cash Flow tab.

**Example:** An example use of this functionality is to provide for adequate funding of a project where sources with the highest orders of contributions have the **Contribution Inc. Interest** switch on. Unless other settings are made to provide for full funding (for example, the "Add Interest to Project" and/or "Add Fees to Project" switches), this can and typically does result in a balancing account contribution that may or may not be fully repaid prior to the end of the project.

### Finance Costs

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
| Finance Rates | Text: drop-down selector with content from the Finance Rates tab | Selects a user defined rate structure (defined in the Finance Rates tab in this area) that includes the interest rate(s), and compounding frequency.  **Note:** If interest is applied to a source, the interest amount is a cost to the project, reducing the project's profitability. Preferred  Returns (PR) are a distribution of profit that are calculated in the same manner as |

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
|  |  | interest but are taken from the available profit. |
| Finance Fee | Text: drop-down selector with content from the Finance Fees tab | Selects a user defined Finance Fee definition (defined in the Finance Fees tab) that includes fees and points for each loan. |
| Project Funds Interest | Select on or off | If checked On, the interest for the current source will be added to the Project Cost exclusive of financing charges, for the purpose of calculating funding requirements. This interest is not included or compounded in the source balance month to month. If left off (the default setting) the interest charge is made and compounded against the source but is not included as a project cost for calculating funding requirements when percentage based contributions are entered. |
| Project Funds Fees | Select on or off | If checked On, the fees for the current source will be added to the Project Cost for the purpose of calculating funding requirements. This control works in a similar manner to "Add Interest to Project". |
| Fees based on Contribution only | Select on or off | Only enabled if a Finance Fee has been selected.  Forced to On if **Add Interest to Project** is on, otherwise selectable.  If On, the fee is based on the source's contribution amount only. However, if the Add Interest/Add Fees switches are turned on, the contribution amount will include an interest and/or fee component.  If Off, the fee is based on the source's contribution including interest. |

Repayments Tab

The individual columns in the screen below are grouped into three main sections, left to right:

* Sources
* Repayments
* Interest Repayments

This component of the Structured Finance module allows you to define any number of repayment regimes that can be applied individually to sources.

Repayments use cash sources in the following order:

1. Cash Available – any surplus cash that has not yet been allocated to any other source – may use either a proportion of cash, or the percentage of funds available entered on the Repayments tab.
2. Reserve Account – when the balance of the reserve account is greater than zero, the program can use either a proportion of cash, or the percentage of funds available entered on the Repayments tab.
3. Balancing Account – when other cash sources are not sufficient to repay the balance, the balancing account shall fund the shortfall.

**Note:** Repayments for each source line must have either (a) % of Funds Available or, (b) Proportionate Repayment box checked.

The items included for definition are as follows: Sources

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
| Source of Funds | Text | This identifies the source on screens & reports. **Note** that the Balancing Account is always entered for you and cannot be removed - it is a necessary part of the analysis and always appears on the last line. Each source listed in the Sources tab can be referred to more than once in the Financing and Profit Distribution tabs, depending upon the contribution, repayment and profit allocations of your current project. Each line in this column must have a source attached. |
| Source Type | Text | This is the source type - either debt, equity, or equity GP, as defined in the Sources tab. |
| Contribution Order | Number | This read-only field shows the contribution order that has been set on the Financing tab. |

Repayments

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
| Order | Integer: does not have to be unique | Repayment within the context of the Finance module refers to repayment of contributions and Interest. It does not include profit or preferred returns, which are dealt with separately in the Profit Distribution tab.  The balancing account is always the lowest numbered order and it will be repaid before any other sources. |
| Repayment Group | Text: drop- down selector | **All Revenue** is the default group. Provides more granularity by splitting up revenue into [Revenue Groups.](#_bookmark164) |
| Manually Time Repayments | Select on or off | When this is on, no Auto Repayments are made for the current Source row - all Repayments must be done manually. The earliest and fixed repayment dates have no effect. |
| Earliest Repayment Date | Selection with timing window | Specifies the earliest date upon which the repayment of the capital or loan can start. Click the **Ellipsis** button to delay the start of repayments. The date selected can be earlier than the date of the first capital contribution. The default date is Project Start. |
| Fixed Repayment Date | Selection with timing window | If (None), repayments of capital or loans take place according to the order and availability of cash. If any date other than (None), specifies the date upon which the full repayment of the capital or loan will occur. Click the **Ellipsis** button to bring forward the repayment date. The date selected can be earlier than the first capital contribution. The default date is None. |
| Repayment Source | Text: drop- down selector | This identifies the source of cash for repayments of capital and interest. If Available Cash is selected, the program will use all available receipts in the project to repay the loan. If either the Rate/Sale Unit or  % of Sale Value option is selected, the program will use a proportion of receipts for unit sales to repay the loan.  **Note:** The Rate/Sale Unit or % of Sale Value selections have their parameters set in the next entry. |

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
| Unit Sales Selection | Read-Only | A read-only field that displays the current number of unit sales items selected for repayment, based on up to three tiers of rate and units, and in the case of rate per unit, a growth set. A zero entry for Up to (Units) means that the rate selected will be applied until the source is fully repaid. The Up to (Units) entry is cumulative, not additive. |
| Unlimited Repayment | Select on or off | This option is available when either of Rate/Sale Unit or % of Sale Value are selected. When On, the proportion of receipts from unit sales will continue to be paid, as profit, to the source after the loan has been repaid. If Off, the repayments will end when the loan has been fully repaid.  **Note:** Selecting this box On should be used with caution, as it can potentially repay a lender (in the form of Profit) much more than just capital, interest, and fees. |
| Proportionate | Select on or off | If On, the Repayment (Contributions and Interest only) for all finance sources in the current order to be in proportion to the contribution percentage cost item in the Contributions category. If Off, the actual amount of repayment in any month for finance sources in this same order will be paid out evenly between sources, irrespective of their percentage contributions. |
| % of Funds Available | % Value | Enter the % of positive cash flows (if any) available each month to repay this source's contributions and interest. |

Capital Repayment Calculations - Earliest Repayment Date

1. The existing date property for earliest equity capital/profit distribution month shall no longer apply to the repayment calculations on the General tab.
2. In each repayment period, the program shall test the earliest repayment date specified for each debt or equity or general partner finance source.
   1. If the current repayment period is earlier than the earliest repayment date, no automatic repayments of capital, interest, or fees shall occur.
   2. If the current repayment period is on or after the earliest repayment date, automatic repayments of capital, interest, and fees may occur, subject to sufficient cash being available.
   3. Manually timed repayments may occur if the current repayment period is earlier than the earliest repayment date.
   4. Inter-Source Transactions, both fixed and percentage, may occur if the current repayment period is earlier than the earliest repayment date.
   5. An outstanding balance repayment may occur if the payment is made before the earliest repayment date.

Capital Repayment Calculations -- Fixed Payment Date

1. The capital balance repayment calculation is enabled only when the selection in the timing editor is NOT None.
2. The capital balance includes:
   1. Contributions – automatic, timed, Inter-Source transactions
   2. Repayments – automatic, timed, Inter-Source transactions
   3. Interest – interest cost, interest repayment – from named source, or project
   4. Fees
3. Balance Repayment Calculations
4. In each period, timed repayments take place before capital balance repayments.
5. In each repayment period, the program shall test the Fixed Repayment Date for each source.
   1. If the current period equals the Fixed Repayment Date, the program shall calculate the outstanding balance and repay it in full.

Interest Repayments

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
| Repay Interest Only | Select on or off | If On, the source's interest charges are automatically paid by the repayment source as they occur. If Off, the source's interest charges are repaid according to its Repayments Category terms. |
| Include Fees | Select on or off | If On, any fees associated with the source that was being repaid will be included with the Interest. If Off, the fees will not be included. |
| Repayment Source | Text: drop- down selector | The selected source in this field pays the source of funds interest if the Repay Interest Only option is On. |
| Repayment % | % value | Defines what percentage of the interest is repaid when the Repay Interest Only option is On. |
| Repayment End Timing | Select from a drop-down list | This controls when the repayment source stops paying the source of funds interest when the Repay Interest Only option is On. When active, this control opens a timing window. |

Unit Sales Selection

You can select either the Rate/Sale Unit or % of Sales Value option from the **Repayment Source** field on the Repayments tab. To display the Unit Sales Selection window, click the ellipsis in the **Unit Sales Selection** field.

You can define up to three tiers of rate and units and an growth (Rate/Sale Unit)/Growth Set (% of Sales Value) for the current number of unit sales items selected for repayment.

A zero entry in the **Up to (Units)** field means that selected rate will be applied until the source is fully repaid.

**Note:** The entry in the **Up to (Units)** field is cumulative, not additive.

Use the drop-down list in the **Scope** field to make settings for all units (Apply to all sales areas), or to specific sales areas (Apply to selected sales areas).

Unit Sales Selection on a Rate/Sale Unit and Scope of “Apply to selected sales areas” basis:

Unit Sales Selection on a % of Sales Area basis and Scope of “Apply to all sales areas”:

This window allows you to define up to three tiers of rate and units for the current number of unit sales items selected for repayment.

A zero entry for Up to (Value) means that the rate selected will be applied until the source is fully repaid.

Use the options in the drop-down list of the **Scope** field to make settings for all units ("Apply to all sales areas") or to specific sales areas ("Apply to selected sales areas").

### Inter-Source Transactions

This component of the Finance module allows you to link finance sources in order to transfer money between them. Here you set up a table that specifies which source is repaying another source, what type of transaction, on which date the transaction will occur and the amount (as a monetary value or percentage). You can also elect to switch off any further contributions from the receiving source once the transaction has been completed.

Two types of transaction are available - a fixed amount and a percentage of outstanding balance. The fixed amount transaction will simply transfer a fixed sum between the sources. The percentage of outstanding balance transaction will assess the receiving source's balance of contributions, interest, loan fees and repayments, and make a transfer equal to this amount. If the balance is zero or a positive amount, no transfer will take place.

The timing of the payments is controlled by selection of stages of development, and the use of other timing triggers such as loan start dates, in addition to fixed dates or periods.

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
| Contributing Source | Select from a drop- down list | This allows you to identify the source from which funds will be transferred. |
| Receiving Source | Select from a drop- down list | This allows you to identify the source that will receive the transferred funds from the contributing source. |
| Transaction Type | Select from a drop- down list | This allows you to specify whether the amount to be transferred will be a fixed monetary amount, or a percentage of the receiving source's outstanding balance. |
| Amount | Percentage value or monetary amount | This field allows you to type in a fixed monetary amount or a percentage, defining the amount of the transaction. |
| Transaction Date | Selection from a timing window | This timing control allows you to specify when the transaction takes place. This opens a timing window. |
| Terminate Contributions for Receiving Source | Select box | If On, the receiving source that has been repaid will cease contributing to a project.  **Note:** If the receiving source is also contributing to any cash shortfall, this option, if selected, will have no effect. This is because cash shortfalls may occur at any time and must be serviced by the shortfall sources.  If Off, the receiving source may still contribute to the project if they have not yet fulfilled their full contribution amount. |
| Exclude Contribution from % Fee Calculation | Select box | If On, any % Fee Calculations for this source will be applied to this Inter-Source Contribution.  If Off, this Inter-Source Contribution line will not be included in % Fee calculations. |

### Finance Rates

This component of the Structured Finance module allows you to define any number of interest rate or preferred return regimes that can be applied individually to sources - whether debt or equity.

The following table lists definitions for the included items.

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
| Description | Text | The label that refers to the definition - examples: Some bank Loan, or Lead Investor Preferred Return. |
| Finance Rates | Text — drop-down list with content from Finance Rates form | Selects the Finance Rates (can change over time) that this item will apply. See below for an explanation of the Finance Rates setup screen. |
| Loan Repayment Type | Text: drop-down list | This allows you to select a Loan Repayment that is Capital and Interest (default) or Interest Only. See Features of Interest Only loan. |
| Capital Repayment Start Date | Selection from a Timing window | Select the date on which the repayment of capital starts. The default date is Project Start. This field is disabled when the Loan Repayment Type = Capital and Interest. |
| Repayment % | % value | The percentage (range 0.00% to 100.00%) of the interest cost that is repaid in each period. |
| Nominal Rates | Select box | If On, nominal rates are used. If Off, effective rates are used. **Note:** This field is not available in North America where Nominal Rates are always used. |
| In Advance | Select box | If On, charges interest in the month it is funded. If Off, first charges interest in the month following the funding. |
| Compounding Period | Select from a drop- down list | Choices include Monthly, Quarterly, Semi- annually, Annually or None (no compounding period, i.e., simple interest). |

Features of the Interest only loan

1. The interest is calculated on the loan’s current balance.
2. The interest only part of the loan is assumed to start at the initial funding date of the loan.
3. The interest is assumed to be repaid automatically by the project in the period in which it is charged.
4. The interest amount will remain the same in each month. It will only change when another draw down of capital takes place, or if a capital repayment is made via a timed repayment or inter-source transaction or if the interest rate definition changes.
5. The interest only repayments continue until the period prior to the capital repayment start date. From this date forwards, capital, and interest are repaid.
6. If the capital repayment start date coincides with the final period in the finance cash flow, an interest only repayment will not be made. Capital and interest will be repaid.

Features of the Capital and Interest Repayment loan

1. Capital and interest are repaid from the initial funding date from cash available, timed repayments, or inter-source transactions.

Loan Calculations

1. When an interest only loan is selected, the interest will be paid from the project in the following order:
   1. From a timed repayment manually entered in the cash flow.
   2. From cash available before other funding sources are repaid.
   3. From the reserve account, after other sources have been repaid, if there is not sufficient cash available to cover the interest cost.
   4. From the balancing account, after the reserve account has been drawn upon, if there is not sufficient cash in the reserve account to cover the interest cost
2. When the **Manually Timed Repayments** option is checked for a source:
   1. No automatic interest or capital repayments will be made to that source during the entire period of the cash flow.
3. Timed Repayments during the Interest Only period
   1. Any timed repayments entered into a funding source cash flow before the end of the interest only period will be used to repay the outstanding interest balance.
   2. Any surplus remaining after the interest repayment will be used to repay the capital balance.
   3. If there is a surplus after the repayment of capital, an entry flagged as an error will be added to the Data Selector to alert the user.
   4. Inter-Source Transactions
      1. Fixed amount repayments made through an inter-source transaction before the end of the interest only period shall be used to repay the outstanding capital and interest balance.
      2. Repayments of interest from fixed amount transactions shall be processed before the calculation and repayment of interest from percentage of outstanding balance transactions.
      3. Percentage of outstanding balance repayments made through an inter- source transaction before the end of the interest only period shall be used to repay the outstanding capital and interest balance.
      4. Repayments of interest from the percentage of outstanding balance transactions must follow the calculation of the transaction amount – either before automatic repayments or after automatic repayments.
      5. Any surplus remaining after the interest repayment from either transaction type shall be used to repay the outstanding capital balance.
      6. If there is a surplus after the repayment of capital, an entry flagged as an error will be added to the data selector to alert the user.
   5. **Repay Balance** Command
      1. The **Repay Balance** command in the Structured Finance Cash Flow screen will continue to repay the outstanding capital and interest balance.

Finance Rates Definition

To open the screen to set up interest rates, click on the **Finance Rates** button in the Finance Setup ribbon.

This screen is also part of the main Assumptions for Calculation window that is accessible in the home ribbon of ARGUS Developer, by selecting the **Assumptions** button. You can make entries from either point of access.

See Also

Interest Sets Tab

You can define any number of rate regimes that can vary over time by using the Add icon and re-labelling the interest set name for each definition item. You can vary interest rates over time by specifying the rate and the number of months that each rate applies.

Click the **Remove Finance Rate** option to remove an interest rates set.

### Finance Fees

This component of the Structured Finance module allows you to define any number of financing fees that can be applied to source contributions on the Financing tab of the module.

The items included for definition for each Fee Set Name are as follows: Standard Fees Category

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
| Fee Set Name | Text - direct input by user | The label that refers to the definition - examples: National Bank Loan Fee, or Lead Investor Fees. |
| Heading | Text as shown above | Each item defined in the **Fee Set Name** field above is set up by default to be a choice of two fixed amount fees and two related fees.  However, the fee type for each line can be changed if, for example, three related fees were required. |
| Fee Type | Select from a drop-down list | Allows the selection of a categorisation type for the fee (can be an entered amount or related to the loan amount). Choices are Fixed and Related. |
| Fee Basis | Select from a drop-down list | Only applies to Related Fee items. Choices are:   1. Drawn Amount (the actual calculated amount of the loan plus interest), or 2. Fixed Loan Amount (manually entered in the next column to the right). 3. Undrawn Amount (where the loan amount is not used - calculates an amount even when there are no draws on a loan). This option is only available if you have the Show Undrawn   Loan Fees option checked in the System |

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
|  |  | Administration settings - see General System Configuration.  4) Fixed Undrawn Amount (manually entered in the next column to the right) |
| Fixed Amount | Amount | Only applies to Fixed Amount items. |
| % Amount | Percent input | Only applies to Related Fee items. |
| % pa Amount | Percent input | Only applies to Related Fee items. This field can be made editable by checking the **Enable Annual % Finance Fees** option in the System Configuration window. See General System Configuration. |
| Fixed Loan Amount | Amount | Only applies if **Fee Type** selection is set to Related Fee. A manually entered amount on which the fee may be calculated. |
| Charging Period | Select from a drop-down list | The default is Single. Other options are Monthly, Quarterly, Semi-Annually, or Annually. |
| Start Date | Specify with a timing window | Allows you to specify a start date for the finance fee. |
| End Date | Specify with a timing window | Allows you to specify an end date for the finance fee. |

Undrawn Fees Category

These options only become visible if you check the **Show Undrawn Loan Fees** option in the System Configuration window.

See Also: General System Configuration

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
| In Advance | Select box | Allows you to specify whether any undrawn fees will be charged in arrears (if the box is not checked) or in advance (if the box is checked). Whether any charge will be made is determined by the setting you make in the **Charge if Undrawn** option.  Becomes available if the Undrawn Amount option is selected in the drop-down list of the **Fee Basis** field. |
| Charge if Undrawn | Select box | Allows you to specify whether or not there is a charge if the loan is undrawn.  Becomes available if the Undrawn Amount option is selected in the drop-down list in the **Fee Basis** field. |

### General

The General tab allows you to specify a variety of parameters.

### Reserve Account

Project Cash Reserve

The Project Cash Reserve is an amount held back from receipts for payment of any substantial costs that occur after income from leases starts to flow or sales come on line. The Project Cash Reserve is funded from Project Receipts, after debt and equity sources have been repaid.

Reserve account rules

The reserve account serves the following purposes:

1. A reserve for cash in the early stages of the project where equity contributions are manually timed at the start of a project rather than automatically drawn when the cash is required. The reserve account works in conjunction with the Earliest Equity Profit Distribution Month switch on the General tab which prevents capital

and profit from being distributed in the early stages of the project where there is excess cash.

If equity contributions, manually timed at the start of the project, are greater than the cash required in the month in which they are contributed and there are no debt sources to repay, the funds will flow into the reserve account without limit. The reserve will then be drawn down to fund project costs as required in advance of equity or debt sources.

1. It recycles surplus cash already committed to the project to cover costs after all financing sources have reached their limit. The reserve account will be drawn prior to the balancing account to cover financing shortfalls. The reserve amount will be built up to the project cash reserve amount after all debt and equity finance sources have been repaid.
2. An operating or warranty fund to be consumed when necessary and released at the end of the project. The reserve will be drawn upon as necessary and rebuilt when funds are available after all debt and equity finance sources have been repaid.

In all cases, the reserve account will be released at the end of the project cash flow to repay any outstanding debt and equity finance sources, or as profit.

It is possible that the Project Cash Reserve can exceed the stated limit due to:

* + Over-funding of a project due to timed contributions from either debt or equity sources

OR

* + The Earliest Equity Profit Distribution Month is set to hold back positive cash flow from the project for a period of months.

Distribute Profit from Reserve Account only after the Final Project Cash Requirement This is used to retain cash in the reserve account to fund future project costs. Select this option if you want to prevent the reserve account from distributing its cash as profit until the final project cash requirement date.

Fund development costs From reserve account

When checked, any cash in the account is used to fund development costs before using debt and equity source contributions. When unchecked, no funding is available from the account and development costs must be met from debt, equity, mortgage, or balancing account sources.

### Financing and Loan Repayments

Revenue (including deposits) Offsets Costs Prior to Financing

This option, when On, will use any receipts from rent, unit sales or other sources to offset project costs before drawing on financing sources for contributions. It is an internal source of financing. When Off, the financing sources will contribute to project costs, then the receipts will be used to repay the sources. This could have the effect of both drawing on and repaying a loan in the same period. This allows for the use of specific sources of positive cash flow to net down project costs prior to calling on other finance sources. The sources of positive cash are: project receipts and mortgage funds.

Mortgage Offsets Costs Prior to Financing

This option, when On, will use any mortgage receipts to offset project costs before drawing on financing sources for contributions. When Off, the financing sources will contribute to project costs then the mortgage receipts will be used to repay the sources.

Calculate Inter-source transaction before Auto-Repayments

This option, when On, permits the calculation of inter-source transactions before auto- contributions. When Off, the calculation of inter-source transactions occurs after auto- contributions.

Repay Outstanding Loans from Balancing Account at End of Project

This option is used to determine whether any loans that remain outstanding at the end of the cash flow will be repaid from the balancing account. If On, the balancing account will make a contribution to the loan that will repay all outstanding capital + interest + loan fees. This will appear as an auto contribution in the source loan's cash flow. If Off, any loan that has not been repaid will remain unpaid and the cash flow may show a deficit.

Mortgage Repayment Shortfall Funded by

This gives provides the option to repay a mortgage shortfall from the balancing account (default) or alternatively repay from the contribution shortfall percentage defined per source in the financing tab.

### Distributions

Stabilised Income Month for Ratio Analysis

This is used to establish a point in time (a month) for calculating the initial yield in projects that do not take out a mortgage. This date is used for the development yield ratio calculation.

Note: This date can be set on, or relative to, a phase stage date using the standard controls for date selection that appear throughout the program.

Earliest Equity Profit Distribution Month

Number of months from the project start date before any repayment of original contributions and interest (if any) and /or profit will be distributed to equity sources and timed project repayments (if they are flagged as "Participating" in the Finance Source tab).

Note: This setting is ignored by timed profit payments as described in Finance Module: Cash Flow View.

If the project generates revenue prior to the earliest equity profit distribution month, the money is held by the reserve account until such time as the program allows capital/profit distribution.

Note: This date can be set on or relative to a Phase/Stage date using the standard controls for date selection that appear throughout the program.

Include Return of Capital and Interest in Cash on Cash Returns

This option, when On, will include the amount of capital, interest and fees returned to an investor in addition to profit distribution when calculating yearly cash on cash returns on the Funding Source Report. When this option is Off, only profit distribution will be used in

the calculation. For a full explanation of the cash-on-cash calculation, please refer to the Performance Measures section of the ARGUS Developer calculation manual.

### Clawback Provision

This section allows the user to define a clawback provision on the General Partner to ensure that they will not keep distributions in excess of a certain percentage which was agreed upon in the limited partnership agreement. The clawback provision will require the general partner to repay the limited partners such amounts which were distributed in excess. A typical scenario is when general partner’s profit is paid out then the project requires a further equity injection (which implies that the hurdles are un-met), the general partner is expected to be the first to inject further equity (Last Out, First In).

Clawback Month

The month in which the clawback provision is activated and cash is redistributed to the investors whose hurdle rates were not achieved (excludes the general partner).

Clawback Returned to Investors in Order

The clawback provision is returned to investors in the distribution order selected in the drop-down list.

### Cash Flow Options

Display Project-Funded information lines (italicised) in Finance Cash Flow

This option, when On, will show additional information rows in the finance cash flow for each source that has its interest or fees funded by the project. The data in these rows will be italicised. When checked Off, these rows will not be displayed in the finance cash flow. Extend project to latest mortgage amortisation period: This option, when On, extends the structured finance cash flow to the latest mortgage amortisation end date.

This option, when Off, terminates the structure finance cash flow on the date of the latest project cost or receipt. This date could be earlier than the end of any mortgage amortisation period.

Extend project to latest mortgage amortisation period

If your mortgage amortisation period falls outside the project end date the project timescale is extended to cover this period when On is selected.

Number of Calculation Iterations

The number of calculation cycles required to calculate project funded interest/finance fees and reserve account payments. Some calculations (Project Funded Interest for example) can only work on the results of a full pass through the finance calculations. Once the results of one cycle are available, they are passed into the calculation engine again. Only when a point of stability has been reached – i.e., when there is no difference between the results of two successive calculation cycles, does the process finish. To prevent endless calculation cycles, the maximum number of iterations is implemented.

The default is thirty-five but not all projects require this. There are occasions where thirty-five iterations are not enough – increasing this number to say fifty or one-hundred is sometimes sufficient to achieve a stable point.

Number of Reserve Account Iterations

The number of calculation cycles required to calculate the Reserve Account. Once the results of one cycle are available, they are passed into the calculation engine again.

Only when a point of stability has been reached – i.e., when there is no difference between the results of two successive calculation cycles, does the process finish. The default setting is 35, but you can adjust this value between 5 and 1,000. There are occasions where thirty-five iterations are not enough – increasing this number to say fifty or one-hundred is sometimes sufficient to achieve a stable point.

Include cash flows for sources with no activity

Check this option to display all sources that have no activity on the Finance Cash Flow report. Uncheck this option to hide sources with no activity.

Note: By default, this option is unchecked.

### Cash Flow Loan Ratios

Numerator for debt source ratio calculations

Select the numerator for debt source ratio calculations:

* **Period drawdown amount** - The sum of contributions, interest, fees and payments.
* **Cumulative loan balance** - The cumulative sum of contributions, interest, fees and repayments.

Combined Source Debt to Equity ratio type

Select which of the following ratios to display in the Combined Sources section of the Finance Cash Flow:

* **Don't show this ratio** - Does not display a ratio.
* **Equity to Debt Ratio** - Cumulative equity invested / Cumulative debt contributions.
* **Debt to Equity Ratio** - Cumulative debt contributions / Cumulative equity invested.

Ratio Types

Select which of the follow ratios to display in the Finance Cash Flow or Funding Source Cash Flow:

* **Loan to Cost Ratio -** Period or Cumulative Loan Balance / Total Costs. Total Costs are Total Development Costs including interest and finance/sales fees.
* **Loan to Gross Development Value Ratio** - Period or Cumulative Loan Balance

/ GDV.

* **Loan to Net Development Value Ratio** - Period or Cumulative Loan Balance / NDV
* **% of Net Cash Flow to be Funded** - Period or Cumulative Loan Balance / Combined Sources Cumulative Net Cash Flow.
* **Interest Coverage Ratio** - Project Net Revenue / Source Net Interest & Fees. Note: Calculated for each given period.

### Development Management Fee

Receiving source

Select a receiving source to which the fee will be paid. Sources must first be set up by the user.

Management fee selection

Click Management fee selection>ellipsis to select fees. See also, Line Selection.

Tax rate

Type a percentage rate.

### Mortgages

This component of the Structured Finance module allows you to define for developments with income-generating leases that are held for a period after completion of construction, mortgages that can be taken out to repay sources that have funded the development.

Debt servicing (principal and interest) is funded from the monthly net operating income. When the property is sold, the mortgages are paid off from the proceeds of the sale.

The amount of the mortgage is based on either the net operating income from the property, or a manual amount entered by the user. When the property's income is deemed to be stable, capitalisation of the income is calculated at a single capitalisation rate to determine the value of the property for mortgage financing. This does not affect project-level cash flows or values.

To calculate the maximum funding amount, the capitalised amount is multiplied by the loan to value percentage (shown as the mortgage amount as a percentage of value entry below).

An alternative method is to use the debt service cover ratio (DSCR). The maximum funding amount on this basis is calculated as follows:

Maximum funding amount = Annual Income/DSCR/(Monthly PI factor x 12) Any number of mortgages can be taken out in each finance structure.

The individual columns on the Mortgages tab are grouped into several main sections, left to right.

* General
* Income and Timing
* Valuation
* Mortgage Value and Amortisation
* Finance Fees

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Description** | **Grid Selection** |
| Active | Select Box | This option, when selected, enables all input fields. When it is not selected, all input fields are disabled.  When this option is selected for any mortgage, the field **Stabilised Income for Ratio Analysis** on the General tab will be enabled.  When this option is not selected for all mortgages, the field **Stabilised Income for Ratio Analysis** on the General tab will be disabled. | General - left aligned and not scrollable. |
| Name | String | The name of the mortgage that identifies it throughout the finance structures. The name must be unique. | General - left aligned and not scrollable. |
| Order | Integer | This field indicates:   * The order in which the NOI is calculated for each mortgage. * The order in which P&I payments are made in each period. * The order in which the mortgage balance repayments are made at the end of the project.   This must be unique. Multiple mortgages cannot have the same order.  Accepts positive integers in the 1-1000 range. | Income and Timing |
| Month to Place Mortgage | Date selection field | This date selection field is used for two purposes:  1. To determine the monthly net operating income from the project when income is stabilised | Income and Timing |

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Description** | **Grid Selection** |
|  |  | 2. To place the start of the mortgage in the financing cash flow.  Mortgages with a higher order will always start at, or later, than the date of mortgages with a lower order.  The date cannot be earlier than any mortgage defined with a lower order.  The Month to Start Amortisation, in the Value section below, can never be earlier than this date. |  |
| Income Selection | Edit button with popup area record selection editor | The Income Selection editor contains a list of capitalised rent area records for the current finance phase group.  There is a option for each item that allows you to include/exclude the record from the mortgage calculation.  100% of the NOI for a selected record will be used in the mortgage calculation.  When a mortgage is added, the default setting for each option on the Income Selection window is ON. | Income and Timing |
| % of NOI | Percentage | Accepts a percentage in the range 0.00% to 100.00%.  Indicates the percentage of annual NOI used in the loan calculation. | Income and Timing |
| Monthly NOI | Numeric - Disabled | This non-editable read-only field shows the net operating income from the area records selected in **Income Selection** in the month chosen in the **Month to Place Mortgage** selector for the current mortgage.  The same area record can be selected for more than one | Income and Timing |

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Description** | **Grid Selection** |
|  |  | mortgage, but no more than 100% of its NOI can be used. |  |
| Annual NOI | Numeric - Disabled | This is the monthly NOI multiplied by 12. The value is not editable. | Income and Timing |
| Manual NOI (Annual) | Numeric - Whole Integers | Accepts positive integers in the range of 0 to 999,999,999,999.  This field can be used to override the annual NOI amount. This allows you to set the mortgage amount above the amount that would be income-based.  When the value of this field is other than zero, the program uses this amount in the mortgage amount calculation. When the value is zero, the program uses the value in the **Annual NOI** field above for the mortgage amount calculation. | Income and Timing |
| Mortgage Value Calculated By | Drop-down List | Drop-down list:   * Loan to Value% - 12 month NOI * Loan to Value% - Annualised NOI * Debt Service Coverage Ratio – 12 month NOI * Debt Service Coverage ratio – Annualised NOI   This drop-down list specifies how the mortgage value will be calculated: either as a loan to value ratio percentage or as a debt service coverage ratio.  LTV is the relationship between the amount the lender will lend, and the value of the property.  DSCR is the ratio of debt service (principal and interest repayments) to rental income. It is a benchmark that measures the borrower’s ability to produce  enough cash to cover its debt. | Value |

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Description** | **Grid Selection** |
|  |  | Lenders will most likely not lend on anything less than 1 unless the borrower has strong outside income.  Two options are required for the calculation of the NOI used in LTV or DSCR mortgages:   1. Multiply the NOI in the month to place mortgage by twelve to achieve an annualised NOI. 2. Take the NOI over twelve months starting in the month to place mortgage to achieve the annual NOI. |  |
| Rate | Either percentage or decimal | Accepts either of the following:   * A percentage in the range 0.00% to 100.00% for the LTV%. * A decimal for the DSR in the range of 0.00 to 100.00.   The format of the field depends on the selection in the **Mortgage Value Calculated By** drop-down list above. | Value |
| Yield | Percentage | Accepts a percentage in the range of 0.00% to 100.00%, and is applied to either the Annual NOI, or the Manual NOI (Annual).  The yield is used to capitalise the Annual NOI or Manual NOI (Annual), whichever has been chosen above, to determine the property value for any Loan to Value type mortgage. It does not affect the capitalised value of leases in the main project analysis area of ARGUS Developer.  **Yield** is used only when  **Mortgage Value Calculated By** | Value |

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Description** | **Grid Selection** |
|  |  | = Loan to Value (LTV) mortgages.  This field will be disabled when the **Mortgage Value Calculated By** = Debt Service Coverage Ratio. |  |
| Project Capitalised Value | Numeric - Disabled | This is the capitalised Annual NOI or Manual NOI (Annual), whichever has been selected above.  Project Capitalised Value is calculated as:  Annual Net Operating Income x (1 / Yield%) | Value |
| Annual Interest Rate | Hybrid Editor | An editor that allows the entry of a single interest rate, or, alternatively, allows the selection from a list of finance rate sets.  The calculation of the interest factor, monthly P&I, and annual P&I variables will be calculated for each period of the mortgage up to the end of the loan term or the end of the cash flow, whichever is sooner. | Amortisation |
| Amortisation Period | Integer - Enabled | Accepts integers in the range 0 - 999.  This is the number of months over which the mortgage would be fully amortised.  An entry of 0 indicates that the mortgage is treated as interest only and is not amortised. | Amortisation |
| Maximum Funding Amount | Numeric - Disabled | This is:   * The Project Capitalised Value multiplied by the Loan to Value %. * The funding amount that produces a DSCR equal to the value in the **Rate** field. | Value |

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Description** | **Grid Selection** |
| Mortgage Issued | Numeric | Accepts positive integers in the range 0 - 999,999,999,999 — the calculated **Maximum Funding Amount**. If the **Maximum Funding Amount** is zero, the field accepts positive integers in the range 0 - 999,999,999,999.  This field is used to override the **Maximum Funding Amount**, and take out a different principal amount mortgage on the property up to the maximum funding amount.  When this field is left at zero, the program uses the **Maximum Funding Amount** value. | Value |
| Month to Start Amortisation | Date Selection Field | This is the date upon which amortisation of the loan will start. It will never be earlier than the Month to Place Mortgage.  If the Amortisation Period is zero, this field will be disabled. | Amortisation |
| Compounding Frequency | Drop-down List | The drop-down list in this field includes the following options:   * Monthly * Quarterly * Semi-Annual * Annual   This is used in the calculation of the Monthly Interest Factor. | Amortisation |
| Monthly Interest Factor | Decimal - Disabled | This field shows the calculated monthly interest factor.  Displayed to six decimal places.  If the interest rate varies, the field will display Varies. | Amortisation |
| Monthly Payment | Decimal - Disabled | This calculated field shows the monthly amount payable at the start of the loan. This will be either principal and interest, or interest only. This is dependent on the setting for the Month to Start Amortisation. | Amortisation |

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Description** | **Grid Selection** |
|  |  | Displayed to two decimal places.  If the interest rate varies, the field will display Varies. |  |
| Annual Payment | Decimal - Disabled | This shows the annual amount repayable to the mortgage lender.  Displayed to two decimal places.  If the interest rate varies, the field will display Varies. | Amortisation |
| Additional Payments | Amount / Time list of Integers | Accepts positive integers in the range of 0 to 999,999,999,999.  Start date is indicated by the Month to Place Mortgage.  Additional payments will be used to reduce the balance of the loan in the period in which they are made.  In the period following the additional payment, the principal and interest due and debt service ratio will be recalculated using the new balance.  If there is more than one additional payment, the field will display Varies.  Where the amount of the payment in any period exceeds the outstanding balance of the mortgage, the balance will be et to zero and the mortgage will be fully repaid. Any additional repayments will be ignored. | Amortisation |
| Month to Repay Mortgage | Date Selection | A date selection field that determines an early fixed repayment date for the outstanding mortgage balance.  The date cannot be earlier than the Month to Place Mortgage.  The default selection for this field is None.  This date will be effective only if it is earlier than: | Amortisation |

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Description** | **Grid Selection** |
|  |  | * The end of the amortisation period. * The end of the cash flow. * When None is selected, there will be no early repayment of the mortgage. |  |
| Debt Service Coverage Ratio | Button Edit  - Read Only | This shows the ratio of Annual NOI to annual mortgage repayment. The higher the ratio, the better able the project is able to service the debt.  A ratio of 1.0 would be a break- even situation where the net operating income is just enough to cover the mortgage payments. Most mortgage lenders would have a minimum ratio of more than 1.0.  If the interest rate is fixed, displayed to 2 decimal places.  If the interest rate varies, the field will show Varies. The edit button can be clicked to show a table that displays the DSR at the start month for each new interest rate. The columns are:   * Month (Short Date Format) * Interest Rate (2 DP) * Debt Service Ratio (2DP) * Annual P&I (Integer) | Amortisation |
| % Finance Fee | Percentage  - Enabled | Accepts a percentage in the range 0.00% to 100.00%.  This is a percentage of the maximum funding amount or mortgage issued values in the mortgage value section (mortgage issued is an override). | Amortisation |
| Fixed Finance Fee | Numeric - Enabled | Accepts whole numbers in the range 0 to 999,999,999,999. | Amortisation |

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Description** | **Grid Selection** |
|  |  | A monetary amount that is in addition to the amount specified in the **% Finance Fee** field. |  |
| Add Total Fees to Mortgage Issued | Select Box  - Enabled | This is an on/off setting to specify whether to add the total fees to the mortgage issued.  If (ON) is selected, the full amount of the mortgage is funded and received by the relevant source, but the opening balance of the mortgage is increased by the amount of the fees. This will result in higher mortgage payments and interest compared with the un-selected option.  If this option is not selected (OFF), the total fees entered will be deducted from the proceeds of the mortgage that is actually received by the relevant sources (usually the primary debt sources). | Amortisation |

**Note:** Copying a mortgage line item clears the income selection for the new copy to prevent double counting of income.

### Profit Distribution Tab

This screen defines the key elements of profit-related distributions to the various sources of funds that have invested in a project.

Profit distributions can range from being very simple to very complex. The simplest distribution would be one source receiving all profits - this requires only one line of profit distribution. Another simple structure would be two sources splitting profits on a percentage basis.

ARGUS Developer allows the set up of unlimited numbers of distributions between sources. The Profit Distribution tab allows profits to be distributed in flexible orders (also called waterfalls) - the results of which are easily followed in the Finance Cash Flow.

**Note:** You may need to install the Advanced Finance module in order to obtain this "waterfall" feature.

The following table describes the set-up of profit distribution:

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
| Source of Funds | Text; non- editable drop-down list | Select from the list of sources in the Sources tab at left of window. Each line must have a source. |
| Source Type | Text | Displays the type (Debt, Equity, or Equity GP) of source for the current line, as defined in the Sources tab. |
| Order | Integer | Order refers to the priority in which the various sources receive profit distributions. Multiple sources can be in an order — if there are a number of orders in a profit distribution they could be referred to as "Waterfalls" or "Tranches" of profit distribution. |
| Profit Distribution Type | Text; non- editable drop-down list | Choices are:   * Preferred Return   If you have the Advanced Finance module, you will also have the following options available to you:   * Project Profit on Cost % Rules for Project Profit on Cost % * Cannot precede a Preferred Return. * Cannot be placed after a Residual %. * Can be placed anywhere else in between. * System only allows one instance of a client for Project Profit on Cost %, i.e. a client can only appear with one Project on Profit on Cost   % rates in the waterfall.  Note: You can review the profit participation by going to Finance Cash Flow>Profit Distribution>Timed Profit Participation.  Note: If the IRR Lookback is larger than the Profit on Cost %, then the IRR Lookback does not pay out.   * Profit Amount * IRR Lookback * IRR Lookback at Sale Date * Promote * Equity Multiple * Catch-Up |

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
|  |  | * Catch-Up Promote * Residual Percentage   **Note:** You cannot mix Profit Distribution Types within the same Profit Distribution Order except IRR Lookback and Promote, Equity Multiple and Promote, or Catch-Up and Catch-Up Promote.  For important rules about the application of the above choices please see [Profit Distribution Types](#_bookmark176). |
| Profit Rate | Integer Value or % Value | Type an amount or % based off the Profit Distribution Type selected. Note: Not available for Preferred Return or Promote selection |
| % Allocation of Funds in Order | % value | Refers to the % of funds this source will receive towards its current row definition profit, within the current order. Applies to all Profit Distribution Types except Preferred Return and Residual Percentage. |
| Finance Rates | Text; non- editable drop-down list | This setting only applies if the Preferred Return option is selected in the **Profit Distribution Type** drop-down list. Available choices are from the entries made in the Finance Rates tab. |
| Include Preferred Return in IRR Lookback | Select box | This setting only applies if the Preferred Return option is selected in the **Profit Distribution Type** drop-down list.  If ON, the Preferred Return payments are included in the cash flow for IRR calculations.  If OFF, the IRR Lookback return is exclusive of any Preferred Return payments. The actual IRR for this source could be in excess of the hurdle rate because the Preferred Return payments are not included. |
| Repay Capital before Preferred Return | Select box | If ON, the Capital is re-paid before the Preferred Return is paid.  If OFF, the Capital is not paid before the Preferred Return is paid. |
| Preferred Return Calculation Method | Text; non- editable drop-down list | Choices are:   * Balance for PR Accrual: Bases the Preferred Return Payment on the Balance for the Preferred Return Accrual. * Capital Balance: Bases the Preferred Return Payment on the Capital Balance. This is a larger sum than the Preferred Return Accrual balance, so this will result in a larger amount   distributed. The Balance for PR Accrual line |

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
|  |  | item does not display in the Finance Cash Flow report when you select Capital Balance. |
| Include Loan Fees | Select box | This setting only applies if the Preferred Return option is selected in the **Profit Distribution Type** drop-down list.  If you select this option, the loan fees calculated on a source's contributions will be included in the cash flow used for calculating the Preferred Return. |
| Tax Rate % | % Value | This setting applies a single, flat, rate of tax to the amount of profit distributed to this source.  In addition to the existing Profit Distribution line shown in the cash flow, two new lines are now shown. These represent the amount of tax and the after tax profit. |

Profit Distribution Types

Below is an explanation of the terms used in the **Profit Distribution Type** field above:

Preferred Return

Calculated like interest based on the balance of capital over time, it is treated as a distribution of profit. When funds are available, they are applied to the accrued balance of preferred returns outstanding first, then to the outstanding capital balance (the return of contributed capital is called repayment). Preferred return types must be in the lowest numbered profit order and not mixed with other types.

Preferred returns cannot be attached to any source of funds shown in the Profit Distribution tab for which there is an interest set defined in the Finance tab.

Project Profit on Cost %

A return based on paying an investor a percentage of total project costs. Distributes a percentage of available cash until the investor achieves the required target.

Profit Amount

A fixed amount of profit to be distributed.

IRR Lookback

Pays funds to a financing source until the target IRR is achieved, evaluated on a monthly basis from available cash flow. The target IRR cannot decrease for the same source of funds as the profit order number increases.

IRR Lookback at Sale Date

Pays funds to a financing source at sale date.

Promote

A return usually paid to a general partner or developer. Promotes can be used with IRR Lookback, Equity Multiple and Profit on Cost % distributions and must be the last

selection in each different distribution order. Distributes a percentage of available cash until another distribution hurdle has been achieved.

Equity Multiple

This profit method is based on distributing profit when a multiple of the capital invested by a source (debt or equity) is achieved. The equity multiple is calculated on the balance of a source’s capital investment, interest & fees, capital repayments, inter-source transactions, and profit from lower-ordered distributions. The amount of equity multiple can be in decimal format – e.g., 1.22 representing 122% of the balance as described above.

Catch-Up

A type of profit distribution that will be paid to the general partner (fund manager) after any preferred return has been distributed in prior orders of distribution. A percentage of available free cash will be paid to the general partner until they have received an amount equal to their share of the total of the profit distributed to date. This includes profit distributed to prior orders AND to the order in which the catch-up appears.

Catch-Up Promote

A catch-up promote profit distribution is allocated the last available percentage of funds in a profit order in conjunction with a catch-up source. The catch-up promote will be paid indefinitely until the catch-up is fully paid. This is the only way in which a catch-up promote can be used. A catch-up promote cannot be used in conjunction with Project Profit On Cost % and cannot be the only profit type with a profit order. It must be entered in conjunction with the catch-up.

Residual Percentage

The final waterfall of distribution, this is the remaining profit to be distributed in a project. The residual percentage type can only be associated with the highest profit order number. The total percentage payable to all residual entries within the highest order should not exceed 100%.

### Performance Measures

The Performance Measures tab which used to be part of the Finance Setup window in versions up to, and including, 4.05, has now been moved to the main application area to integrate it more fully with the reporting functions.

See Also

Key Performance Indicators

## Finance Module: Cash Flow View

Once you have entered your finance assumptions, you can view the results in the cash flow area of the program. This area shows you the results in a timed cash flow,

compared with the snapshot view in the Performance Measures area in the main Developer workspace. Reports of the finance cash flow can be previewed and printed from the Reports area of the program.

To access the Finance Cash Flow view, go into the main workspace of ARGUS Developer and select the Finance Cash Flow tab.

**Note:** The Structured Financing mode must be selected for the finance sources cash flow to display. If the Basic (Interest Sets) mode is active, Structured Finance Cash Flow details will not be displayed.

The Finance Cash Flow view provides a detailed breakdown of each finance source over the life of the project. Options in this area that you can select on the ribbon include the following:

* **Expand:** Click the **Expand** button to expand all cash flows.
* **Collapse:** Click the **Collapse** button to collapse all cash flows.
* **Cycle:** Select the Cash Flow View choices of Monthly, Quarterly, Half Yearly, and Annually. There are also custom view cycles that you can define in the drop- down list.
* **Order:** Select from the following:
  + Show Consolidated Profit & Source Cash Flows
  + Show Detailed Cash Flows in Contribution Order - this view provides a more detailed breakdown than the Consolidated view.
  + Show Profit by Distribution Order, then Detail
  + Show Summary of Finance Structures by Source - this view provides a Summary cash flow for each funding source. Each summary contains selected cash flow data from all the finance structures in which the source participates. The heading for each cash flow line clearly shows to which finance structure it belongs. The cash flow lines are grouped by contributions, repayments, interest and fees, closing balance, profit distribution, net cash flow, and cumulative net cash flow.
  + Show Revenue & Cost Groups by Finance Structure

### Group Lines

The project-level view is always shown as the first group in the Finance Cash Flow. Each source then has a grouping line which will display basic assumptions and performance measures: IRR, profit, and return on equity (ROE).

IRR

The IRR is based on the "Net Cash Flow (IRR)" line (second from the bottom).

ROE (Return on Equity)

Total Returns divided by total contributions.

In #

Refers to the order of Contribution (1 is first, 2 is next, and so on) and the percentage of cost contribution.

Out #

Refers to the order of repayment; noting that the balancing account is always repaid first. Within both equity and debt sources, you can specify them with the same (or different) order number.

Debt Funding Source

This source type (Debt) only appears if you have defined a debt funding source; one such group view will appear for each defined debt source of finance.

Timed Contributions

These are "spot" figures you enter in a specific period in the Cash Flow view (monthly only). When a timed contribution is entered, no automatic contribution will be calculated in the same period. If the cash flow does not require the full amount entered, the excess is added to the reserve account in the Project Cash Flow as a receipt and will be distributed back to the sources according to their definitions. Timed contributions can only be entered when the Finance Cash Flow view is set to Detailed Cash Flow in Contribution Order.

Auto. Contributions

These are contributions calculated by the program from the cash requirement in any period, and are defined in the main Finance Setup area. At the outset of the project time frame, the source may have committed an amount representing its Contribution to the project. The program will spend this as and when required, until the balance is reduced to zero.

Total Contributions

The total of Timed and Auto Contributions.

Loan Fees

Fixed amount, % and Total loan fees. Please see [Finance Fees](#_bookmark172) for Loan Fee information.

Interest and Fees

The total amount of interest accumulated by the partner's loan in the period displayed, plus any loan fees defined.

Timed Repayments

Timed Repayments refer to the date and amount for a specific repayment of original contributions and interest (if any) for this source. If there is not enough money available, the balancing account will fund any shortfall.

Auto Repayments

Automatically calculated repayment of original contributions and interest (if any) for this source. "Repayments" specifically exclude Profit (if any).

Total Repayments

Total of timed and auto repayments.

Closing Balance

The current period ending balance of account for this source.

Timed Profit Participation

Includes contributions/repayments/interest/profit.

Auto Profit Participation

This is optional, allowing for debt sources that earn interest and/or a share of profits; this option is defined in the main Finance Setup covered in the first section of this chapter.

Total Profit Participation

The total of timed and auto profit participation.

Net Cash Flow (IRR)

The actual line used for the calculation of IRR.

Cumulative Net Cash Flow

Current period net position for this source.

Equity Source

Equity sources earn their return from repayment of their original contributions, their share of available distributions from cash flow, proceeds of sale and proceeds of mortgage (permanent financing), and any reserve amount held by the balancing account at the end of the project.

See previous notes for the Debt Source for an explanation of the line types shown above.

Mortgage

These lines display the monthly cash flows related to the mortgage.

Balancing Account

See previous notes for Debt sources for an explanation of the line types shown above.

Combined Sources

See previous notes for Debt sources for an explanation of the line types shown above.

## General Principles of Structured Finance

Treatment of Preferred Returns

Preferred returns are considered as a distribution of profits of a project, rather than an Interest cost. This means that a preferred return is not part of the total project cost, as it is paid to an equity source - and thus results in a lower cost base for the project than if the same amount was paid as an Interest cost. Accrued preferred returns are repaid prior to the repayment of a source's contribution.

Repayment Order

You cannot go to the next repayment order # until the repayment of sources in the current repayment order # is complete.

**Example:** Repayment order 2, available cash distribution: partner A 20%; partner B 10%; construction loan 70%; repayment order 3: partner C 100%; If partner A gets fully repaid but partner B and the construction loan have balances outstanding, the intent is to finish paying off partner B and the construction loan before moving onto partner C, otherwise partner C would have been included in repayment order 2. The above principles apply within the context of the month-to-month calculations that ARGUS Developer does; therefore, it is possible that a repayment order 3 could be repaid in the same month as a repayment order 2 from an overall (project) perspective, as long as the

calculations were complete for order 2 within the same month. This is further effected by the potential inclusion of timed profits.

Setup of Interest Cost and a Preferred Return for the same source

You cannot have an Interest cost in the Financing tab and a preferred return in the profit distribution tab for the same source of funds (irrespective of order).

Profit Distribution Definition

In the Profit Distribution tab, Preferred Return definitions must be entered as the lowest order. The actual order number can be any number, just as long as it is the lowest number in the order column.

**Note:** There is no connection between the order numbers that appear in the Profit Distribution screen and the Financing screen; they work independently. You cannot mix profit distribution types within the same profit distribution order except IRR lookback and promote.

Timed Profits

Timed Profits are not permitted when preferred returns are selected for a Finance setup.

Repayment Orders

Structured Finance sources are repaid before the Project Cash Reserve is funded.

## IRR Calculations

ARGUS Developer provides a number of different Internal Rate of Return (IRR) calculations. All IRR values are calculated on a monthly basis, with the monthly rate converted to an annual rate with the general formula: 1 - (1 + monthly IRR)^12. The IRR is recalculated automatically to reflect the currently active phase or group of phases.

The KPI panels in the main Developer workspace can be configured to display Pre- Finance, Project, and Equity IRR:

In addition to the above IRRs, there are individual IRRs calculated for each source in a project.

The various IRRs are explained below:

Ungeared IRR

This IRR is the IRR that a Phase or Group of Phases would produce without regard to financing costs (interest) and without consideration of how the project is funded.

The following screen example shows the "Net Cash Flow Pre-Finance (IRR)" line from the Finance DCF view, which is calculated prior to the consideration of Interest and profit.

Combined Sources IRR

Also referred to as "IRR" (it is shown as IRR in the results bar), this is a composite of the monthly cash flows for all sources (both debt and equity) of the following contributions and repayments over the life of the finance structures that are currently activated:

Contributions:

* All Debt Sources
* All Equity Sources Repayments including Interest:
* All Debt Sources
* All Equity Sources

All Profit Distributions (Profits include Preferred Returns):

* All Debt Sources
* All Equity Sources

The calculation of the combined sources IRR is illustrated below in the Finance Cash Flow area:

The "Total Contribution" line is the total of all contributions from all Structured Finance sources. The "Net Cash Flow (IRR)" line is the total of all net cash flows for all Structured Finance sources.

**Note:** Where a Tax Rate% has been entered for a profit distribution source, additional lines will be automatically added to the cash flow to represent:

* Tax amount calculated on Pre-Tax Profit
* After Tax Profit Amount
* Net Cash flow After Tax (IRR)

Equity IRR

This is the overall combined IRR (not an average) of all equity sources in a project based on:

* All Equity Source Contributions
* All Equity Source Repayments including interest, if any
* All Equity Source Profits including Preferred Returns, if any

The equity IRR will typically be higher than the combined sources IRR, since the equity IRR takes advantage of the debt financing, whereas the combined sources IRR is a composite IRR for all sources including the debt sources.

To see the individual IRR for each equity partner, refer to any one of the following areas:

* Performance Measures in the main developer workspace
* Finance Cash Flow view (as shown in the combined sources IRR explanation above);
* Report Menu - Funding Source Cash Flow report.

**Note:** Where a tax rate percentage has been entered for an equity source, an additional IRR will be calculated for the after tax equity IRR.

## Timed Contributions

Timed Contributions allow you to re-distribute the timing of a source's contributions to a project — they do not provide for changing the actual amount of contribution. If you require detailed control (instead of the "auto" contributions calculated by the program) over the total contribution made by a source, use either the **Contribution Cap** or **Fixed Contribution** fields in the Financing tab of the Finance Setup.

To enter timed contributions, go to the Finance Cash Flow Area>Ribbon>Order>Detailed Cash flows in Contribution Order.

**Example:** The developer's contribution is payable in irregular amounts as required by the specific needs of the project for cash. However, if the developer has agreed to pay a certain amount "up front" in the first month this can be defined as a timed contribution, with the balance of his contribution payable as required by the project calculated automatically by ARGUS Developer, as shown below.

**Note:** The automatically calculated "Auto Contribution" in month one is zero with the timed contribution: Project Amount being active. The total amount Contributed by the developer has not changed from that originally calculated by ARGUS Developer. Timed contributions can be made for any debt or equity source.

## Timed Repayments

Timed repayments may be made in the Finance Cash Flow view in the Show Detailed Cash flows in Contribution Order view in two ways:

The first way is similar to the timed contributions described above, where the program will automatically re-distribute the timing of a source's repayments from the project. In this mode, the program will not change the actual amount of repayment relative to it being calculated in full Auto. Repayment mode.

This method requires that the Manually Time Repayments option in the Repayments tab of the setup area is clear (off) for the source, as shown below:

Once this is set, you can enter Timed Repayments in the Cash Flow area for the source under discussion.

The second method allows complete control over the amount and timing of repayments. To do this, select the Manually Time Repayments option (ON) for the source in question in the screen above. When this box is selected, the "Auto. Repayments" for the source is disabled completely, allowing for (only) arbitrary and unadjusted repayments.

## Timed Profits

Timed Profits may be entered into the Profit Distribution Cash Flow Group in the Finance Cash Flow.

To do this, you must first set the Finance Cash Flow view to Detailed Cash flows in Contribution Order. Then the Profit Distribution Group will appear and will be editable, as shown for a typical source in the following screen segment:

Whenever a timed profit participation is entered into a given month, then any automatically calculated profit in that month is removed, and the total profit payable to the source over the total project is adjusted up or down depending upon the amount entered. In other words, the total amount of profit paid to the current source will not be maintained at its originally calculated value prior to a timed profit participation value being entered.

## Timed Finance Events

Where timed finance events are active in existing version four files that are upgraded to version 4.05, the inputs for timed finance events are retained and the timed finance events functionality retained - until you remove (zero out) all such entries. If you remove all timed finance events, this area of functionality disappears; it is no longer available within a file, and is replaced by the Inter-Source Transactions feature.

See Also

[Inter-Source Transactions](#_bookmark169)

## Reporting Structured Finance

You can view and print the Funding Source Cash Flow report from the Structured Finance setup window by clicking the **All Sources** button as shown below.

**Note:** There are also a number of Finance related reports contained in the main reporting area of the program – see the Report Setup area accessible in the main workspace of Developer.

This will open the Funding Source Cash Flow report:

You can print, view and write to PDF/Word/HTML individual cash flow statements for each source in the Finance Cash Flow area, by right-clicking any cash flow cell for a source, then making the desired selection from the list below:

### Exporting to Excel

To export the finance cash flow to Excel, right-click on a cell in the finance cash flow area, then select from the export choices on the drop-down menu as shown below:

## Financing Tab

## Quick Reference - Line Item Finance

File>Ribbon>Structured Finance>Line Item Finance

Line Item Finance lets you specify which funding sources will contribute to which development costs in a finance structure. Costs can be allocated to a funding source by category, for example **All Acquisition Costs** or by specific line items, for example **Land Cost for phase 1**. All revenue in a structure continues to be used for repayments, regardless of which costs the funding sources contribute towards.

See Also

Structured Finance - Line Item Finance

### Cost Groups

Cost Groups are used to assign costs to a funding source. A group can hold cost categories and/or individual line item costs. Each finance structure has a default cost group called ‘Development Costs’ which contains all costs from the structure’s finance phase group. There is no limit on the number of custom cost groups that can be created.

Cost groups have the following features:

* Cost groups are attached to a finance structure
* Specific costs cannot be allocated to more than one cost group
* Any costs not allocated to a custom group remain in the default group
* When a cost is allocated to a custom group, it is removed from the default group
* When line items are added to the project, they are automatically included in cost groups
* When line items are deleted from the project, they are automatically removed from cost groups

Example

An acquisition loan is available to fund the acquisition costs for a new development. The loan cannot be used to fund any other costs and the maximum loan available is $10 million.

Create a new structure Follow this procedure:

1. Go to Ribbon>New Finance Structure.
2. Type a name for the structure.
3. Select a Finance Phase Group from the pick list.
4. Create a **Land Costs** group.
5. Go to Ribbon>Costs Groups>Add New Group.
6. Name the group **Land Costs**.
7. Click the filter pick list and select **Land & Acquisition**.
8. Click **Add All.**
9. Result: Land costs are added to the new group.
10. Click **OK.**
11. Note: Line items can be included in only one group. When a line item is moved to a new group, it is automatically removed from its current group.

Create a Land Costs Group

1. From the ribbon, select ‘Costs Groups’
2. Add a new group and call it ‘Land Costs’
3. From the filter drop down, select ‘Land & Acquisition’
4. Click the Add All button to add land costs to the new group
5. Click OK to close the dialog
6. Note: Line items can be included in one group only. When a line item is moved to a new group, it is automatically removed from its current group.

Create a Land Loan

1. Go to Sources>Add New Debt Source.
2. Name it **Land Loan**.
3. Go to Financing>A New Source.
4. Click Source of Funds>Land Loan.
5. Type the Contribution % of Costs as 100%.
6. Type the **Contribution Cap** as 10,000,000.
7. Option: Set up multiple lenders for the land costs by creating additional sources of funds and attaching the same **Land Cost** group. Enter the % Contribution each lender will make and specify the order in which each source of funds becomes available.
8. Note: Where there are multiple funding sources contributing towards the same cost group, it is possible to define different tranches of contribution. This allows,

for example, one source to fund the first 50% of the costs and the remaining sources to contribute the remaining 50% at different proportions.

1. Note: For each contribution order in a cost group, it is not possible for the total contribution % to exceed 100%.
2. Note: The Balancing Account is hidden when you use cost code groups and allocate percentages of equity to them.

See Also

Structured Finance - Line Item Finance

## Quick Reference - Calculate the Loan Advanced Purpose

When a developer is seeking debt funding, or a lender is assessing the borrowing requirement, it is possible to calculate the loan advanced on the following bases:

* + % of Gross Development Value
  + % of Net Development Value
  + % of Total Costs – optionally less Sales Fees

The loan is advanced as a fixed contribution and can be monitored using a new chart on the Reports drop down menu on the main application ribbon bar.

See Also

Structured Finance - Loan Ratio

### Example

Calculate the Loan Advanced Amount

A bank agrees to provide a loan of 65% of the gross development value of a new development. A report must be provided to show how the loan is used to fund all development costs.

1. Create a structure.
2. Attach a finance phase group.
3. Click the Sources tab and add a new debt source named **Bank Loan**.
4. Go to Financing tab>Source of Funds and select Bank Loan.
5. Click the **Fixed Contribution** ellipsis button. Result: The Loan Ratio Pop-Up appears.
6. Select % of Gross Development Value.
7. Type **65%** in **Loan Ratio**.
8. Result: Loan amount is calculated and displays in the **Loan** field.
9. Click **OK.**
10. Close the Structured Finance setup.

Show the Loan Monitor Report

1. Go to Ribbon>Preview Reports>Analysis Charts>Chart Type>Loan Monitor.
2. Result: All funding sources display.
3. Check the sources you want to display.

See Also: Structured Finance - Loan Ratio

# Capitalised Rent and Sales

## Capitalised Rent and Unit Sales

Navigation: Home Ribbon>Definition>Capitalised Rent

To enter a schedule of tenants and capitalised rent, click on the **Capitalised Rent**

command in the Definition group on the Home tab.

When the Area, Construction and Rent schedule appears, enter the information required relating to gross and net floor space, construction, rent rates and yield.

Unit and Floor Space Information

**Heading:** You can label each area with a heading of up to 60 characters in length.

**Unit Number:** Reference number.

**Use Type:** A use class description for this area record. The list of use classes can be customised. See Use Classes.

**Number of Units:** The number of units built and leased or sold.

**Parking Spaces:** The number of parking spaces allocated to the units in this area record. This field allows a single decimal in the input so that non-standard sized parking spaces can be modelled.

**Gross Unit Area ft2:** The gross, or buildable, area per unit. This can be calculated from the Gross Area / Number of Units, if left blank.

**Gross Area ft2:** The total gross, or buildable, area. This is normally calculated from the Gross Unit Area x Number of Units.

**Net Unit Area ft2:** The net leased, or sellable, area per unit. This can be calculated from the Net Area / Number of Units, if left blank.

**Net Area ft2:** The total net leased, or sellable area. This is normally calculated from the Net Unit Area x Number of Units.

**Gross: Net Ratio:** The ratio of the disposal (net) area to construction (gross) area is shown here. This field can be locked at a fixed value so that all floor areas will be calculated with reference to it.

**Additional Unit Area ft2:** The additional unfinished area per unit used in the calculation of gross construction costs. This can be calculated from the Additional Area / Number of units, if left blank.

**Additional Area ft2:** The total additional unfinished area used in the calculation of gross construction costs. This is normally calculated from the Additional Unit Area x Number of units. The additional area is not included in the gross or net areas for any other calculation purposes.

**Alternate Area:** The alternate area is a field available for your own use to describe any area or unit information. It is not included in any other area totals but can be used in miscellaneous cost calculations.

### Construction Costs

Base construction cost for each unit may be entered using a construction rate, unit rate or the gross cost. Alternatively, you can enter a detailed breakdown of the costs for this particular unit. See [Construction Cost Breakdown](#_bookmark191) below for more information.

When you enter the construction rate/ft², the Cost/Unit and Gross Cost will be calculated from the rate x gross area. For any combination of inputs, other cost fields will be calculated automatically. For example, if you enter the gross cost, the construction rate and Cost /Unit will be calculated automatically using the number of units and the gross area.

Construction costs will be distributed automatically over the length of the construction stage entered in the Timescale & Phasing screen. You can change this on either a global basis, or for individual area records.

**Build Rate /ft²:** The base construction rate used to calculate the gross cost. The rate can be expressed in either square feet, or square meters, depending on the units of measurement setting in the Preferences screen.

**Rate Additional /ft²:** The rate used to calculate an additional unfinished cost based on the Additional Area.

**Cost / Unit:** The gross cost per unit, which includes cost based on the Net Unit Area + Additional Unit Area. The cost per unit may be entered directly only when the Additional Unit Area is zero, otherwise it is calculated automatically from other inputs. (Gross Unit Area x Rate + Additional Unit Area x Additional Rate)

**Cost / Parking Space:** The unit cost for each parking space.

**Parking Spaces Cost:** The total cost for all parking space.

**Gross Cost:** The gross cost which includes costs based on the Net Area + Additional Area + Parking Costs. The gross cost may be entered directly only when both the Additional Area and Parking Cost are zero, otherwise it is calculated automatically from other inputs. (Gross Area x Rate + Additional Area x Additional Rate + Parking Spaces x Cost / Parking Space)

**Stage:** The development stage to which the construction cost is attached. This defines when the cost starts and for how long it is distributed in the cash flow. The timing and distribution can be changed by clicking the ellipsis button to use the Data Distribution screen. This topic is described in Timing and Distribution.

**Starts In:** This read-only field shows the date on which the gross cost starts in the cash flow.

**Distribution Months:** This read-only field shows the number of months over which the gross cost is distributed in the cash flow.

**TI Rate /ft² (Letting):** The rate per square foot for Tenant Improvements. The cost is calculated as a single, non-distributed amount timed to the lease start date. Change the timing and distribution by clicking the ellipsis button.

**TI % Rate (Letting):** The % of rent payable for Tenant Improvements. The cost is calculated as a percentage of the rent payable over the first term of the lease. It is calculated as a single, non-distributed amount timed to the lease start date. Change the timing and distribution by clicking the ellipsis button.

**TI Cost (Letting):** The fixed cost for tenant improvements. The cost not distributed and timed to the lease start date. Change the timing and distribution by clicking the ellipsis button.

### Construction Costs - Financial

Cost inflation can be included, together with Interest and sales tax using the Financial tab.

**Cost Inflation:** Inflation is calculated on the gross cost by selecting a set of inflation rates from the **Inflation** drop-down list. The rates may be static, or may vary over time. When you add a new cost, inflation is not automatically applied – you must select a set of rates from the drop-down list. To create sets of inflation rates, click the **Inflation**

**Rates** command, or select **Assumptions > Inflation and Growth** from the menu. If the inflation rates vary over time, this will be indicated by showing *var.* in the **Inflation** field.

**Construction Interest:** If you are using the Basic Interest (Interest Sets) finance type, you can apply different interest rates to each construction cost. Structured finance does not allow the selection of interest rates for individual costs. Interest is calculated on a cost by selecting a set of interest rates from the **Interest Set** drop-down list. The rates may be static, or vary over time. When you add a new cost, a default interest set selected automatically. To create sets of interest rates, click on the **Interest Rates** command, or select **Assumptions > Interest** from the menu.

**Sales Tax:** Sales tax on the gross cost may be calculated and recovered using the **VAT Rate** and **VAT Recovery Rate** fields. By default, the same rates are used for calculating sales tax on the tenant improvement costs, tenant void costs and leasing commission costs. To use different sales tax rates, check the **Manual VAT Rates** option. You will now be able to apply different rates in the VAT screen or the Cash Flow Row Properties screen. To set the rules that determine how sales tax is calculated and recovered, use the **VAT** command in the Finance group on the Home tab.

**Exclude Gross Area:** For any costs that are based on the total gross area, you may want to exclude specific area records. To do this, check the **Exclude Gross Area** option.

### Construction Cost Breakdown

The Construction Cost Breakdown schedule allows you to easily enter detailed lists of construction elements for each area record. The Breakdown allows an unlimited number of elements to be defined using a variety of different calculation types.

When a schedule of detailed cost elements has been entered, the construction cost rates and costs on the Construction tab will be replaced by the total cost from the breakdown schedule. It will not be possible to enter data into these fields until the breakdown schedule is cleared, or the total breakdown cost is zero.

To add a new breakdown element

1. Click the **Add New Cost** command.
2. Enter a heading for the cost and choose a **Type**.
3. Enter the rate for this type into the **Amount** field.
4. Select any source costs by clicking the **Selection** ellipsis button.
5. Change the default timing, if required, using the **Timing** ellipsis button.
6. Enter any notes about this cost.

To create a default schedule of breakdown elements

If you have a standard list of cost elements that are used more than once in a project, you can simplify the entry process by creating a template which can be used when required in any area record. The template can contain a list of cost element names with a cost type for each - (fixed, related percentages and so on), each of which can be overridden when attached to an area record.

1. Click the **Edit Default Cost Breakdown** command.
2. Add new cost elements by clicking the **Add** command.
3. Enter a name and select a cost type for each item.
4. Click the **OK** button.

To Add a default schedule of breakdown elements

1. Click the **Add Default Costs** command.
2. If you have not created a default breakdown schedule, you will be prompted to create one first.
3. If you have a default schedule already defined, the default cost elements will be added to the breakdown schedule.
4. Enter the rate and make any source cost selections using the Selection ellipsis button.
5. Click the **OK** button to close the breakdown schedule.

To apply inflation or sales tax

1. Click the **Show Extra Detail Columns** command.
2. Select inflation rates, per item, from the **Inflation** drop-down list.
3. Enter sales tax and recovery rates, per item, in the **VAT Rate** and **Recovery Rate** fields.

Categorise the cost

1. Click the drop down for the **Category** column.
2. Select one of the following options:
   * **Base**
   * **Landlord**
   * **Tenant**
   * **Other**

You can now view the breakdown of construction costs based on category.

### Annual Rent

Annual rent for each tenant may be entered using a rent rate, market rental value (MRV)/unit per annum or the gross market rental value (MRV) per annum. You may elect to enter these rates in terms of monthly amounts – choose **Options > Monthly Rent Rates** to do this.

When you enter the annual rent rate, the MRV/Unit and the Gross MRV is calculated from the rate x net area. For any combination of inputs, other rent fields will be calculated automatically. For example, if you enter the gross MRV, the rent rate and MRV/Unit will be calculated automatically using the number of units and the net area.

**Rental Growth:** Growth can be applied by selecting a growth set from the drop-down list.

**Step Rent Profile:** Where there are fixed rent steps agreed between a landlord and tenant, you can select from a number of stepped rent profiles. Please see [Stepped](#_bookmark192) [Rents](#_bookmark192) for more information.

**% Non-Recov. Cost:** Type a non-recoverable cost %. This amount calculates from the Start Rent (Gross pa) and deducts from the tenant’s rental income.

**Fixed Non-Recov. Cost:** Type a non-recoverable cost amount. This amount deducts from the tenant’s rental income.

**Total Non-Recov. Cost:** This is the total of both the % Non-recov. cost and Fixed Non- recov. cost amounts.

**Ground Rent Deductions:** This is the ground rent deducted from annual gross rent, producing the valuation rent figure.

**Start Rent (Net pa):** Start Rent is the rent that will be used to calculate the capital value. It is calculated from the gross rent, inclusive of growth, less any non-recoverable costs and ground rent deductions. When the Tenant’s True Income Stream option is checked, the Start Rent takes rent reviews into account.

**Rent Free Period (Months):** A rent free period can be granted to a tenant by filling in the Rent Free Period field. The loss of income can be represented in several ways. For more information, see Rent Free Cost Methods.

**Lease Comm. Profile:** Leasing commissions paid to an agent for leasing services are entered here. Use the drop-down to select a profile that contains rules for calculating the leasing commission for this tenant. See also, [Leasing Commission Profiles](#_bookmark193).

**Lease Comm. Distribution:** Click the ellipsis to control how the amounts are distributed along the cash flow line. See also, Timing and Distribution.

### Rent Additions/Costs

When you want to incorporate recoverable and non-recoverable costs for a group of tenants, use the Rent Additions/Costs schedule.

Click on the **Click to View Rent Additions/Costs** hyperlink.

An unlimited number of recoverable and non-recoverable items may be entered. Enter a recoverable cost as a Revenue type and enter a non-recoverable cost as a Cost type.

|  |  |
| --- | --- |
| **To** | **Do this** |
| Add/Delete new rows | Use the **Add** and **Delete** buttons. |
| Change Cost or Revenue | Click in box and select from drop-down. |
| Change Type | Click in the field and choose from one of following options:   1. Fixed Amount/Unit/Year. 2. Fixed Amount/Area/Year. 3. Amt/ft2/yr x Net Area (or Amt/m2/yr x Net Area). 4. Amt/ft2/yr x Gross Area (or Amt/m2/yr x Gross Area). 5. Amt/ft2/yr x Alternate Area (or Amt/m2/yr x Alternate Area). 6. % of Base Rent 7. % of Gross Rent |
| Apply to different area/units from the area schedule | Click into **Selection** and apply to a tenant. |
| Apply growth to rows | Click into **Inflation / Growth** field and select from menu of growth sets (previously defined). |

|  |  |
| --- | --- |
| **To** | **Do this** |
| Apply private or tenant capitalisation rate | Click into the **Capitalisation** field and choose either Use Private Rate or Use Tenant Rate. If choosing **Use Private Rate,** enter rate to the right of box. |

### Turnover Rent

Turnover rents for retail properties can easily be entered using the Turnover Rent tab.

**Sales Volume pa:** Enter the anticipated sales volume for a retail tenant. The sales volume pf² pa will be calculated automatically if a net area has been entered.

**Sales Volume /ft² pa:** Enter the sales volume rate pf² pa when you don’t know the sales volume pa.

**% of Turnover:** Enter the % of sales volume to be used to calculate the rent receivable from sales volume.

**Breakpoint Type:** The breakpoint determines the threshold at which % rent is receivable.

There are three breakpoint types:

Zero Breakpoint

The % rent rate multiplier is applied to the entire sales volume p.a. Example: 1,000,000 Sales Volume pa \* 7% = 70,000 pa.

Natural Breakpoint

This is sometimes used where the total rent comprises a core, or base, income and an additional turnover rent. The lease may guarantee the landlord a certain percentage of the total income subject to a minimum core rent that can move over time. This core rent is calculated as an equivalent value in terms of Sales Volume. This equivalent value forms the natural breakpoint.

The Natural Breakpoint will move as core rents increase and decrease. Example: 1,000,000 Sales Volume pa, 8% 10,000 standard rent.

If the landlord is entitled to 8% of Sales Volume, the 10,000 standard rent would be worth 125,000 to him/her, if it were expressed as Sales Volume. This 125,000 is the natural breakpoint.

10,000 core rent / 8% = 125,000 natural breakpoint.

Only sales volume in excess of the breakpoint is valued as turnover rent. (1,000,000 Sales Volume - 125,000 Natural Breakpoint) \* 8% = 70,000 turnover rent The total rent payable is the 10,000 core rent plus 70,000 turnover rent.

Arbitrary Breakpoint

Only sales volume in excess of the arbitrary breakpoint is used to calculate the turnover rent. Arbitrary breakpoints are entered as amounts per annum, per unit area.

Example: 1,000,000 Sales Volume, 8% and 200,000 Arbitrary Breakpoint.

(1,000,000 sales volume - 200,000 arbitrary breakpoint) \* 8% = 64,000.

**Arbitrary Break:** These fields are available when the arbitrary breakpoint type is selected.

**Turnover Growth:** The Sales Volume may be subject to growth. Select Ignored from the drop-down list to ignore growth, or select an growth rate set.

### Lease Options

Where a development is retained as an investment or where pre-lets are achieved, the information on the Lease tab will generate a flow of rental income in the cash flow. To enable the flow of rent from the lease details, select **Valuation** from the main menu then select **Tenant’s True Income Stream**.

**Lease Start Date:** The period from which rent will start to flow in the cash flow. If a rent- free period has been granted, the number of months will be added to the lease start date to determine the date on which the rent will start to flow.

**Note:** To adjust the lease start date, click on the ellipsis button.

|  |  |
| --- | --- |
| To | Do this |
| Make the lease start date commence at the beginning of another stage. | Use the Stage and Phase settings in the timing window to select another stage. |
| Make the lease start date commence on a specific period. | Use the **Period** option to select the date in the timing window. |
| Make the lease start date commence on a specific date. | In the Timing window select Date then use the date picker to select the date. |

**Term (Years):** Number of years in the lease.

**Term (Months):** Number of months in the lease.

**Payment Cycle:** Frequency of rent payments - either monthly, quarterly, semi-annual or annual in advance.

**Review Cycle Years:** Rent review cycle in years.

**Align to Sale Date:** Forces the flow of income in the cash flow to run up to the sale of the property when the lease expires before the sale date.

**Void Cost Rate /ft² pa:** Costs incurred during initial letting period, measured from the start date of the 5th development stage of the current phase until the let comes into effect; and during periods of vacancy between terms if a leasing period (entered in whole months) has been defined.

**Renew this lease:** For short-term leases, renew the lease by checking this option.

**Renewal Term (Years):** Number of years in the renewal lease. **Renewal Term (Months):** Number of months in the renewal lease. **Letting Period:** The void period, in months, for all renewal terms.

**Rent Free Period (Months):** The rent free period, in months, for all renewal terms.

**TI Rate /ft² (Renewal):** Tenant improvement rate for all renewal terms. Cost is based on net area and is triggered on each renewal term.

**TI Cost (Renewal):** Fixed tenant improvement cost for all renewal terms.

### Rent - Financial

You can specify interest and VAT rates on the Financial page:

**Interest Set:** If you are using the Basic Interest (Interest Sets) finance type, you can apply different interest rates to each tenant’s rental income and capital value. Structured finance does not allow the selection of interest rates for individual tenants. Interest is calculated on a tenant’s rent by selecting a set of interest rates from the **Interest Set** drop-down list. The rates may be static, or vary over time. When you add a new tenant, a default interest set selected automatically. To create sets of interest rates, click on the **Interest Rates** command or select **Assumptions > Interest** from the menu.

**Sales Tax:** Sales tax on the rental income and capital value may be calculated and recovered using the **VAT Rate** and **VAT Recovery Rate** fields. By default, the same rates are used for calculating sales tax on the rental income, turnover rent, capitalised rent, operated asset revenues and expenses, and rent free costs. To use different sales tax rates, check the **Manual VAT Rates** option. You will now be able to apply different rates in the VAT screen or the Cash Flow Row Properties screen. To set the rules that determine how sales tax is calculated and recovered, use the **VAT** command in the Finance group on the Home tab.

### Rent Capitalisation

Rental income from a tenant’s lease is capitalised using the Rent Capitalisation tab.

**Tenure:** Select from Freehold or Leasehold tenure in the drop-down list. When Leasehold is selected, additional options are available on the Ground Lease tab.

**Yield%:** Type a % to calculate the capital value for each tenant. For Master Yields see, Calculation Assumptions.

**Manual Capital Value:** Where a capital value has been agreed for a tenant, it can be entered directly into this field. Any value entered into this field will override the calculated value and will be used in the valuation of the project.

**Stage:** The sale date, or cap date, can be changed here by clicking the **Stage** ellipsis button. The timing is usually defaulted to the beginning of the sales stage.

### Leasehold Properties

To enter a Leasehold tenure for a tenant, select **Leasehold** from the **Tenure** drop-down list. When the Leasehold tenure is selected, a new tab - the Ground Lease tab – is shown.

**Lease:** A master ground lease profile may be selected here. See the Master Ground Lease topic.

**Term in Years:** The length of the ground lease in years. A lease term of 0 years will be interpreted as perpetuity when calculating the Years Purchase factor.

**Sinking Fund:** Type a % for sinking fund.

**Tax on Sinking Fund:** Type a % for the tax on the sinking fund.

**Leasehold Gearing %:** If the property has a geared ground rent, enter the percentage into the **Leasehold Gearing %** field. The geared amount will be deducted from the MRV before capitalisation.

**Fixed Ground Rent Deduct.:** If the property has a fixed per annum ground rent, enter the amount into the **Fixed Ground Rent Deduction** field. The amount will be deducted from the MRV before capitalisation.

**Total Ground Rent Deduct.:** Non-editable calculated amount. Fixed Ground Rent Deduct. + (Start Rent Gross pa \* Leasehold Gearing %)

### Lease Events

Each tenant entered into the Cap Rent schedule has its own cash flow lease events table created for use in the rent and capitalisation calculations. Use the **Lease Events** command to view a schedule of rents and MRVs, inclusive of growth.

The Rent and MRV are usually the same at the Leasing and Review dates (though this may not be the case if, for example, a stepped rent profile has been applied). The Exit on Sale Period event shows the MRV plus any growth on the rent from the last Rent Review.

### Master Ground Lease

You can save time when entering leasehold properties by setting up a Master Ground Lease. Then, when entering each tenant’s details, you can attach the Master Ground Lease. The Master Lease Definition editor lets you enter a lease name, term in years, sinking fund and tax on sinking fund.

To create a Master Lease

1. Click the **Master Ground Lease** command.
2. Enter a name for the master ground lease.
3. Enter the term in years, **Sinking Fund %** and Tax rate on **Sinking Fund %**.
4. Click the **OK** button.

Any changes that you made to a master ground lease will be automatically reflected in the Rent Capitalisation section. The tenant will show the revised ground lease terms and the capital value will be recalculated.

To assign a Master Lease to a tenant, close the Master Lease Definition editor and choose a lease name from the **Lease** drop-down list on the Ground Lease tab. The terms will be copied to the tenant record and you can enter any ground rent deductions for the ground lease:

### Stepped Rents

At the grant of a new lease, terms agreed between landlord and tenant may include provision for stepped rents - fixed uplifts in rent at specified intervals. On the next event (expiry/renewal) following the defined stepped rents, it is assumed that market rent will resume.

Stepped rents apply only during the first term of a lease (in other words - not to a renewal lease), and when tenant’s income flow is activated during the development. Stepped rents cannot be set for dates after the project end date.

Stepped rents are not subject to growth but may be subject to ground rent deductions.

Stepped rent profiles are created in the Stepped Rent Profiles window and attached to a tenant using the **Step Rent Profile** drop-down list in the Rent tab.

To create a stepped rent profile

1. Click the **Stepped Rent Profiles** command.
2. Enter a name for the profile.
3. Enter the Base Date – the date on which the first step begins.
4. Fill in the profile table with the date, duration and calculation type for each step.

The table below sets out the five types of rent step type:

|  |  |
| --- | --- |
| Step Type | Stepped Rent Basis |
| Rate pf2 (or pm2). | Net floor area x Rate. |
| Rate pf2 (or pm2) adjustment. | Net floor area x (previous rate +/- rate adjustment). |
| $Rent pa/unit. | $Rent per annum. |
| $Rent pa/unit adjustment. | Previous rent +/- rent adjustment. |
| Resume Market Rent. | Market rent. This step type effectively terminates the stepped rents and reverts to the annual rent defined in the Rent form. |

A net floor area must be entered for the tenant for Rate pf2 (or pm2) and Rate pf2 (or pm2) adjustment step types.

### Leasing Commission Profiles

To create a leasing commission profile

1. Click the **Leasing Commission Profiles** command.
2. Enter a name for the profile.
3. Select the commission basis from the **Basis** drop-down list. The four basis types are explained below.
4. Fill in the remaining fields – fields will be enabled depending on the **Basis**.
5. Enter the number of months and rates into the commission table for % Base Rent and % Gross Rent types.

### Commission Basis

**Fixed Amount:** On completion of the letting, a fixed amount is paid by the Developer/Landlord.

**Rate /ft²:** On completion of the letting, a rate per square meter or foot is paid. There is also the option of entering a different rate (based on Net Area) if the lease renews.

**% of Base Rent:** On completion of the letting, you are able to define several steps with different rates if necessary. You can also enter a renewal rate for the entire term.

This uses the total base rent over:

* + First term of lease
  + Subsequent renewal terms

Base Rent includes turnover but excludes Rent Additions/Costs.

**% of Gross Rent:** On completion of the letting, you are able to define several steps with different rates if necessary. You can also enter a renewal rate for the entire term.

This uses Total Rent over:

* + First term of lease
  + Subsequent renewal terms

Gross Rent includes turnover and Rent Additions/Costs.

Note: For % of Base Rent and % of Gross Rent types, additional options are available on the Calculation tab in the Assumptions window. These options specify whether the Leasing Commission is calculated before or after the deduction of non-recoverable costs from the rent.

**First Term Rate:** For the Rate pf² type, this is the rate that is applied to the net area for the first term of the lease.

**Renewal Term Rate:** For the Rate pf², % Base Rent and % Gross Rent types, this is the rate that is applied to the renewal term of a lease.

**Renewal Rate:** On First Renewal Only Select this option to calculate leasing commissions for the first renewal term only. All subsequent renewal terms will be ignored for purposes of this calculation.

ITZA Definition for Retail Units

You can quickly enter area definitions for retail shop units using the ITZA calculator. Each of the area definitions in the area schedule can be linked to the ITZA calculator by moving to the area and clicking on the **Retail Zoning (Area ITZA)** button on the tool bar.

To create a new ITZA schedule

1. Click the **Retail Zoning (Area ITZA)** command/
2. Enter the Zone A rate, Number of Zones and the Zone Reduction % for each successive zone.
3. Click the **OK** button.

A blank ITZA schedule will now be created. Enter the areas for each zone to create the ITZA Rent.

**Zone A Rate:** You can change the Zone A rate at any time by clicking into the **Zone A Rate** field and typing a new value. When the Zone A rate is changed, all ITZA area values are recalculated using the new rate. The new total Rounded MRV is calculated, replacing any manual changes. Any non-ITZA lines in the schedule will be unaffected.

**Heading:** The heading for each row is generated automatically. You can override any heading by typing a new name.

**Area:** You can specify the size of a zone by entering either its depth and width, or its total area. The rental value will be calculated by multiplying the area by the Zone A rate together with the % Zone reduction and the % Adjustment. To display columns for zone depth and width, click on the **Show dimensions** button.

**MRV Rate:** The MRV rate is locked for ITZA rows and is generated from the Zone A Rate. However, for non-ITZA rows, you can enter the MRV rate.

**% Position:** The % position indicates the reduction in value for each zone based on its position in the unit. This value will be filled in automatically when new schedules are created. When you add individual lines, you must enter a value.

**% Adjust +/-:** You can make adjustments to any row by entering a value into the % Adjust cell. When an adjustment has been entered, the Adjusted MRV rate will be calculated and used to determine the rental value. Typically, you would use this for return frontages.

### Editing the ITZA Schedule

To add a new Zoned row

1. Click on the Add zoned line button:
2. Enter the area, either as a width and depth, or the total area.
3. Enter the zone’s % Position. You should override the default value of 100%.
4. The MRV for this line will be calculated automatically from the Zone A rate.

To add a new non-zoned row

1. Click on the **Add non-zoned line** button:
2. Enter the area, either as a depth and width, or the total area.
3. Enter the MRV rate.
4. The zone’s % position will be entered as 100%. You can override this.
5. The MRV will then be calculated.

To delete any row

1. Select the row that you want to delete and click on the **Delete line** button:
2. The schedule will now be recalculated to reflect the loss of value.

To delete all rows in the schedule

1. Click on the **Clear schedule** button

All rows will be deleted and the totals set to zero. To create a new ITZA schedule

1. Click on the **Create zones** button
2. Follow the steps described in To create a new ITZA schedule

To round the MRV

1. Click into the **Rounded MRV** field.
2. Enter the new MRV.

To round the Net Area

1. Click into the **Adjusted Net Area** field.
2. Enter the new area.

## Unit Sales

Navigation: Home Ribbon>Definition>Unit Sales

To create a schedule of non-capitalised units for sale, select the **Sales Areas > Unit Sales** command in the Definition group on the Home tab.

To model an estate of single family residential units, select the **Sales Areas > Single Unit Sales** command in the Definition group on the Home tab.

To model a residential apartment unit, select the **Sales Areas > Multiple Occupancy Unit Sales** command in the Definition group on the Home tab.

The unit and floor space details and construction costs are entered in the same way as for capitalised units. It is not necessary to enter gross or net areas for unit sales – the program can work with only unit costs and values.

See Also Construction Costs

### Sales

The sale price for each unit may be entered using the sales rate, sales/unit or gross sales price. When you enter the sales rate, the sales/unit and the gross sales price is calculated from the sales rate x net area. For any combination of inputs, other sales fields will be calculated automatically. For example, if you enter the gross sales price, the sales rate and sales/unit will be calculated automatically using the number of units and the net area.

### Timing and Distribution of Net Sale Value

The net sales value is assumed to be placed as a single amount at the start of the sales development stage in the time scale & phasing area. The timing and the distribution can be overridden on an area by area basis using the Data Distribution screen, which is opened by clicking on the **Stage** ellipsis button.

The advantage of linking sales values to a stage, is, that if you change the stage in the Time scale & Phasing area, all sales values linked to it will be updated automatically.

The two fields titled **Starts In** and **Distribution Months** show when the timing begins, and over how many months the sales value is distributed. These are read-only fields.

### Deposits/Pre-Sales

Residential developers will typically take a deposit for an apartment or house up front, with the remainder paid on completion of the building’s construction. The value of the units will be distributed in two sections: a period over which deposits will be received and a single amount for the remainder.

Deposit

Deposit as a percentage of sale price to be paid up front.

Total Months

The number of months before the first sale when the deposit is paid.

Distribution Months

The period over which the deposits can be collected prior to the first sale from the initial deposit term.

Deposit Curve

The deposits can be distributed using any of the standard methods available in ARGUS Developer.

Distribution Weighting

If you use the weighted distribution type, this field becomes active.

Offset (-Months)

Once the first unit has been sold, the pre-sales period ends and all further deposits are collected prior to the sale of each subsequent unit. The **Offset** field specifies how many months before the sale a deposit will be collected. An offset of zero will collect the deposit in the same period as the sale takes place. An offset of negative one will collect the deposit in the period prior to the sale and so on.

Use Manual Distribution

Selecting *Yes* allows you to manually distribute the deposits.

Distribution Detail

Opens up the data distribution function for editing.

**Example 1:** Twenty (20) units are to be sold at $250,000 each, over a five month period on an even curve basis. Therefore, four units will be sold each month. A 10% deposit is to be taken for each unit and the initial deposits (on the first month’s sales) are to be taken four months before the first four units are sold and spread over a two month period on an even basis. The remaining deposits are to be paid two months before the units are sold - this is the Absorption period. The illustration below reflects this scenarios.

**Example (With Growth):** Five (5) units are to be sold at $250,000 each over a five month period. Therefore, 1 unit is sold per month. A 10% deposit is to be taken for each unit and the initial deposit is to be taken four months before the first unit is to be sold.

The other deposits are to be taken the month before the sale in the Absorption period. The sales line has growth applied at 2% per annum from the project start date. In the example below, we see an initial deposit of $25,500 in month 9 and the first sales figure of $229,500 in month seventeen. For the first sale in month seventeen, the program grows the sales figure up to the month in which the deposit is taken (month thirteen).

The calculation is as follows: $250,000 \* 1.021 = $255,000; Deposit of 10% = $25,500; Remainder is $229,500 in month seventeen. For the remaining four sales, the program grows the sales figure up to the month in which the deposit is taken, and the remainder appears a month later.

### Sales Fees

The Sales Fees tab is displayed in the Unit Sales, Single Unit Sales, and Multi Unit Sales screens. It allows you to specify commission settings for sales.

Comm. at Sale %

This is commission being paid upon the signing of a sales contract to a third party. You can use this to model sales agent fees on a per-area basis. The amount being paid is a percentage of the unit price inclusive of growth; therefore, there is no explicit inflation on the cost itself. The distribution of the fee follows the distribution on the Sales Starts line for the area.

Comm. at Completion %

This is commission being paid upon sales completion to a third party. Again, you can use this to model sales agent fees on a per-area basis. The amount being paid is a percentage of the unit price inclusive of growth; therefore, there is no explicit inflation on the cost itself. The distribution of the fee follows the distribution on the Actual Completions line for the area, taking the growth information from the Sales Starts line for the area.

Unsold Unit Fee / Month

This is a fee that is payable on units for which construction has completed, but that so far remain unsold. You can use this to model condominium fees for multi-unit developments, site security for single unit developments and so on. The amount is multiplied on a per-period basis with the number of units for each period as found on the Units Available line for the area.

Unsold Units based on

Select Planned Completions or Actual Completions to determine the number of unsold units.

### Sales Additions/Costs

To include additional sales revenue and costs, based on the unit sales, click the **Click to View Sales Additions/Costs** hyperlink. You are able to add unlimited costs and revenue items. The values for each of the items will be either added to, or deducted from, the total sales value.

|  |  |
| --- | --- |
| To | Do This |
| Add/Delete new rows | Use the **Plus** and **Minus** buttons |
| Change Cost or Revenue | Click in box and select from drop-down |
| Change Type | Click in field and choose from one of various options:   1. Fixed Amount/Unit/Year 2. Amt x Net Area 3. Amt x Gross Area 4. Amt x Alternate Area |

|  |  |
| --- | --- |
| Apply to different area/units from the area schedule | Click into **Selection** field and apply to unit(s) |
| Apply inflation/growth to rows | Click into the **Inflation/Growth** field and select from menu of the previously defined inflation sets |

## Residential Sales

Navigation: Home Ribbon>Definition>Sales Areas

The Single Unit Sales and Multiple Occupancy Unit Sales schedules are intended primarily for residential developments.

You can open the Single Unit and Multi Unit Sales schedules by clicking **Sales Areas** in the Definition group on the Home tab then selecting the schedule. Alternatively, click ellipsis in the Definition screen.

To show unit sales fields

To show hidden unit sales fields:

1. Navigate to **>ARGUS tab>Control Panel>Preferences.**

#### Click General>Show Unit Sales Buttons>Show Single / Multi Sales Buttons.

1. Click **OK**.

### Single Unit Sales

To enter single unit sales, click **Home>Definition>Sales Areas>Single Unit Sales**.

Many fields in this screen match other area-based forms for Capitalised Rent or Unit Sales. Differences are described below.

### Construction Cost Distribution

In single unit sales, batches of units are grouped together for construction and sales purposes. Each batch of units can start construction every month, two months, quarter or year. Each batch is given a duration to complete construction, and the costs are distributed over a standard S-Curve by default.

Constructing the units in batches will show a distorted construction curve when you view it in the Data Distribution screen. This is because each batch of units overlap by a few months, flattening out the distribution curve.

The sales revenues and deposits will tend to be received during the construction cycle, thereby reducing the interest payments over the term of the project.

### Construction Cycle

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
| Stage / Starts in | Defines the start timing for the first batch of units to be constructed. |  |
| Starts Per | Select the cycle in which construction starts:   * Monthly * Two-monthly * Quarterly * Annual |  |
| Starts / Cycle | Defines the number of units that begin construction in each cycle. | Until a non-zero value is entered here, all units start construction in the first construction period. |
| Construction Duration | The construction duration defines the number of months each batch of construction units takes to complete. |  |

Sale Timing and Distribution

The timing of the initial sale is defaulted to the Construction development stage entered in the Timescale & Phasing area. It can be overridden by clicking Stage ellipsis in the Sales tab.

Once the initial timing is set, the distribution is automated using the fields in the Sales Distribution tab.

Sales Deposit

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
| Deposit % | Type the deposit percentage. | The deposit for a sale is payable on the signing of a sales contract and so the distribution on a deposit line for a single unit sales area is directly determined through the fields controlling the sales distribution. |

Initial Sales

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
| Sales % | This field is a “virtual” field. The actual value stored on the area record is the number of units sold on day one. | The initial sales can be entered as a percentage. |
| Units | This is the number of units that is expected to be sold when the sale for the area is first launched. 50 | Normally more sales contracts are expected to be signed during that month than during the regular sales period. If this field is non- zero, the number of units in the first sales period is taken from this field. If the field is left zero, the number of units sold in the first sales period is controlled through the regular sales fields. |

Balance of Sales

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
| Sales per | Select sales cycle. |  |
| Units / Frequency | Type the number of units sold during a sales cycle. | If this field is zero, the total number of units minus in the first month sales period, or an adjusted number of units in the second month of the sales period if day one sales have been modelled for the area. |
| Months to Complete | Type the minimum number of months between the signing of a sales contract and the completion of the sale. What determines the actual difference in months is whether enough units have been constructed to cater for the demand. | If your project has a large number of units, say 100 or more, make sure that the distribution of sales units doesn’t produce a long cash flow. Long cash flows will make the application run very slowly. |

Months to Complete Example

For an area record with 500 sales units and a velocity of 1 sale per month, a cash flow of 500 months would be produced. In this situation, a warning message is displayed and you are given two options to shorten the length of the cash flows:

* Change the construction schedule or sales distribution to shorten the project length, or;
* Change the cash flow view cycle to Annual.

### Multi-Unit Sales

To enter multiple occupancy unit sales, select the **Sales Areas > Multiple Occupancy Unit Sales** command from the Definition group on the Home tab.

Many of the fields in this screen are the same as other area-based forms for Capitalised Rent or Unit Sales. There are some differences, however, and these are described below.

### Sales Timing and Distribution

The most complex automatic sales distribution patterns can be modelled through the multi unit sales schedule.

Multi unit sales contain up to four sales periods. Multi unit sales contain up to four sales periods:

* Initial (day one) sales
* Sales prior to construction
* Sales during construction
* Absorption sale: Takes place when construction is completed.

Initial Sales

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
| Sales % | You can enter Initial Sales as a percentage. | This is a “virtual” field. The actual value stored on the area record is the number of units sold on day one. |
| Units | This is the number of units that is expected to be sold when marketing of units begins. | Typically, a greater volume of sales contracts is signed during the first month than during the regular sales period.  When you enter a non-zero value, the number of units in the first sales period is taken from this field. |

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
|  |  | When you enter a zero value, the number of units sold in the first sales period is controlled through the regular sales fields. |

Sales Prior to Construction

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
| Sales % | You can enter the number of units sold prior to construction as a percentage, which will then be automatically converted to a number of units per period. | This field is a “virtual” field. The actual value stored on the area record is the number of units sold each period prior to construction. |
| Sales Per | Select sales cycle:   * Month * Two Months * Quarter * Year |  |
| Units / Frequency | Type the number of units that are expected to be sold each period prior to the start of the area construction. |  |

Sales During Construction

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
| Sales % | The number of units sold during construction can be entered as a percentage, which will then be automatically converted to a number of units per period. | This field is a “virtual” field. The actual value stored on the area record is the number of units sold each period during construction. |
| Sales Per | Select sales cycle:   * Month * Two Months * Quarter * Year |  |
| Units / Frequency | Type the number of units expected to be sold each period during the area construction. |  |

Sales After Construction

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
| Sales % | The number of units sold after construction can be entered as a percentage, which will then be automatically converted to a number of units per period. | This field is a “virtual” field. The actual value stored on the area record is the number of units sold each period after construction. |
| Sales Per | Select sales cycle to be used:   * Month * Two Months * Quarter * Year |  |
| Units / Frequency | Type the number of units expected to be sold each period after the area construction. |  |
| Months to Complete | Type the minimum number of months between the signing of a sales contract and the completion of the sale. | What determines the actual difference in months is how long a client has to wait until he can take possession of the unit, which is controlled through the Monthly Move In field. |

Move In

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
| Monthly Move In | The monthly move in determines for how many units the sale can be completed each month. | The number of people moving into a condo development is restricted by the number of elevators and allowing more units to be occupied would be counter- productive. In such a case, you can use the Monthly Move In field to delay sales completions. |

Move In Examples

If your project has a large number of units, say 100 or more, make sure that the distribution of sales units doesn’t produce a long cash flow. Long cash flows will make the application run very slowly.

Example

For an area record with 500 sales units and a velocity of 1 sale per month, a cash flow of 500 months would be produced. In this situation, a warning message is displayed and you are given two options to shorten the length of the cash flows:

* Change the sales distribution to shorten the project length
* Change the cash flow view cycle to Annual

### Sales Contracts

Multi-unit sales areas do not have a **Deposit %** field. Instead a more flexible and market- driven way of receiving sales revenue is achieved by using sales contracts. Sales Contracts are selected from the Sales tab.

Each area record can use two different contract types:

* **Pre-sales Contract:** Sales prior to construction completion.
* **Absorption Contract:** Sales after construction.

### Sales Contract Editor

To create and edit Sales Contracts, select the **Sales Contracts** command, or select the

**Area > Sales Contracts** menu command.

The sales contract editor works in a similar manner to other Developer schedule editors. Default Contract

A basic contract:

* Defines opening stage
* Defines closing stage
* Set up to collects deposit percentage at opening stage
* Set up to collects remainder at closing stage

Contract Definition

Each contract definition requires:

* Opening stage - This is when the client signs the contract to buy the unit. You can control timing via the sales starts unit information line.
* Closing stage - This is when the client takes possession of the unit. You can control timing through the actual completions unit information line.
* Collection of 100% (or optionally more) of unit sale price

**Note:** To **Allow more than 100% distribution**, click the check box to provide an uplift in this sale’s price.

Contracts Ribbon

Click **Add Contract** to add more contracts.

Click **Delete Current Contract** to delete selected contract. Click **Copy Contract** to copy selected contract.

Click **Move Up** or **Move Down** to move Contract record. Contracts Input Grid

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
| Name | Type contract name. |  |

Contract Lines Ribbon

Click **Add Contract Line** to add more lines to selected contract. Click **Delete Current Contract Line** to delete selected line.

Click **Move Up** or **Move Down** to move Contract Line record. Contract Lines Input Grid

|  |  |  |
| --- | --- | --- |
| **Field** | **Description** | **Notes** |
| Stage Name | Type stage name. |  |
| Value | You can enter a percentage for each stage. | The amount must be between 0% and 100%. |
| Timing | Click the ellipsis to set timing. | When Opening or Closing Stage is checked, you cannot edit Timing. |
| Offset | Enter the number of months after initial sales when a stage occurs. | The amount must be between -600 and 600.  When Opening or Closing Stage is checked, you cannot enter a number of months for Offset. |
| Opening Stage | Check box to set timing to Opening Stage. | Only one Contract Line can be set to Opening Stage at a time. |
| Closing Stage | Check box to set timing to Closing Stage. | Only one Contract Line can be set to Opening Stage at a time. |
| Allow Payment After Completion | Check box to allow payment after completion. |  |

### Graph view in the Sales schedules

You can view sales activity graphs in all sales schedules:

* Unit Sales
* Single Unit Sales
* Multi-Unit Sales

To view these graphs, click Graph View on the tool bar in the sales schedules.

Graph Type

Click this to view a chart of activities/chart of cumulative activities.

Line Detail View/Schedule View

Click either of these to view data input mode..

## Quick Entry Area Schedule

Navigation: Home Ribbon>Definition>Areas, Construction, Revenues & Units Sales>Capitalised Rent>Hyperlink Click to View Construction Cost Breakdown

You can save time when entering floor space details and rates by using the Quick Entry Schedule. This style of entry allows you to define area records using a spreadsheet-style table that displays only the fields that you want to work with

To open the Quick Entry schedule, click on the **Schedule View** command, or select View > Show Schedule View.

The Quick Entry schedule is comprised of several main sections:

* The tool bar that allows you to change the number of fields displayed and to copy fields and rows;
* The Area data entry grid
* The Construction Cost Breakdown grid (displayed when you use the **View > Show Cost Breakdown** menu option);
* The summary of areas, costs, and revenues.

### Quick Entry Toolbar

When the wide schedule view is used, there are some additional commands that become available.

**Copy Down:** Copy a single value down through a column by clicking on this button. Move to the value you want to copy, click on the button and enter the number of times the value is to be copied. The value is copied down the column, replacing existing entries.

**Fill Series:** Copy a value and modify it for each subsequent row using this command. Select the cell you want to copy, select **Fill Series** and enter the parameters of the value you want to change. See the topic on using the **Fill Series** command later in this section.

### Quick Entry Table

The quick entry table is a grid of rows and columns. Each row represents a definition for a single area, and each column represents a field within the area. A selected cell appears highlighted on the screen. The active cell is the cell into which data is entered when you start typing. Only one cell is active at a time.

Some cells will remain fixed – you may not enter a value into them. These fields are calculated automatically and include: Total rent deductions, Net rent p.a. (or Valuation Rent), Net capitalised rent and Rent free amount.

The table contains a subset of the available fields for area definition. You can see more detail for the current area by clicking on the **Detail** command button at the foot of the screen. Use the detail view for entering inflation, growth, interest sets and for specifying the timing of construction costs and receipts.

### Housekeeping functions in the schedule view

In the schedule view, you have access to copy, paste and move functions that allow you to copy and paste and move area records between schedules. This allows you to duplicate records, in order to speed up data input.

To Copy and Paste an area record

1. Select the area by clicking into the table.
2. Select the **Copy Area** command.
3. Enter the number of copies.
4. Click the **OK** button.

The area record will be pasted at the end of the table. To Copy all areas to the clipboard

1. Select the **Edit > Copy Area Schedule** command.
2. Select either Copy Current Area or Copy All Areas.
3. Copy all columns in the table by checking the **Switch to All Columns** option.
4. Click the **OK** button.

The **Paste** command may now be used to work with the copies. To paste area records from the clipboard

1. Select the **Edit > Paste into Schedule** command.
2. Select the position where you want to paste the data.
3. Click the **OK** button.

**Note:** Data can be inserted before the first area record, before the currently selected record, or after the last area record.

To copy an area record to a different phase

1. Select the **Edit > Copy to another Phase** command.
2. Select either the current record, or all records option.
3. Select the phase number.
4. Click the **OK** button.

The record or records are copied to the same schedule but in a different phase.

To copy an area record to a different schedule

1. Select the **Edit > Copy to another Schedule** command.
2. Select either the current record, or all records option.
3. Select the name of the schedule.
4. Click the **OK** button.

The record or records are copied to a different schedule within the same phase. There may be some data loss due to the different types of data used in each schedule.

**Example:** Moving a capitalised rent record to the Unit Sales schedule would result in the loss of the cap rate because unit sales do not work with cap rates.

To move an area record to a different phase

1. Select the **Edit > Move to another Phase** command.
2. Select either the current record, or all records option.
3. Select the phase number.
4. Click the **OK** button.

The record or records are moved to the same schedule but in a different phase. The records in the original schedule are deleted.

To move an area record to a different schedule

1. Select the **Edit > Move to another Schedule** command.
2. Select either the current record, or all records option.
3. Select the name of the schedule.
4. Click the **OK** button.

The record or records are moved to a different schedule within the same phase. The records in the original schedule are deleted. There may be some data loss due to the different types of data used in each schedule. For example, moving a Capitalised Rent record to the Unit Sales schedule would result in the loss of the Cap Rate because Unit Sales do not work with Cap Rates.

Copying values in the schedule

When you want to copy a value in a record to a number of other records, you can use the Fill Down command. The Fill Down command takes the value from the selected cell, copies it to a series of records then recalculates each record based on the new value.

**Example:** If you wanted to change the Cap Rate for all records to a new value, you could use the Fill Down command to copy the Cap Rate in the selected cell to all other records.

To copy a value to other records

1. Select the cell whose value you want to copy.
2. Select the **Fill > Fill Down** command.
3. Enter the number of records you want to copy to.
4. Click the **OK** button.

The **Fill Down** command works by copying to a specific number of records from the current record down through the schedule.

### Filling a Series

Instead of entering data manually into the schedule, you can use the **Fill Series** command to fill cells with data that follows a pattern or that is based on data in other records.

To fill cells with a series of numbers

1. Select the **Fill > Fill Series** command.
2. Enter the number of records you want to fill with new values.
3. Under **Type**, click one of the following options:
   * **Linear:** Create a series that is calculated by adding the value in the Step Value box to each cell value in turn.
   * **Percentage:** Create a series that is calculated by adding a percentage in the Step Value box to the original value to each cell in turn.
4. In the Every box, enter the frequency at which each cell should be filled:
   * To fill every row, enter 1.
   * To fill every other row, enter 2 and so on.
5. Click the **OK** button.

To fill cells with a series of dates

1. Select the **Fill > Fill Series** command.
2. Enter the number of records you want to fill with new values.
3. Under Date Unit, click one of the following options:
   * Month Create a series that is calculated by adding the number of months in the Step Value box to each cell date in turn.
   * Year Create a series that is calculated by adding the number of years in the Step Value box to each cell date in turn.
4. In the Every box, enter the frequency at which each cell should be filled:
   * To fill every row, enter 1.
   * To fill every other row, enter 2 and so on.
5. Click the **OK** button.

To fill cells with a series of text headings

1. Select a cell under the Heading or Unit Number columns.
2. Select the **Fill > Fill Series** command.
3. Enter the number of records you want to fill with new values.
4. For the **Append** (text Fields only) option:
   * Select the box to create a series of headings that are calculated from the original heading plus a numerical index.
   * Un-check the option to create a series of headings that are calculated from a numerical index plus the original heading.
5. In the Every box, enter the frequency at which each cell should be filled:
   * To fill every row, enter 1.
   * To fill every other row, enter 2 and so on.
6. Click the **OK** button.

To undo a Fill Series command

1. Select the **Fill > Undo Fill Series** command.

## Deposits as a Source of Funding

Navigation: Home Ribbon>Sales Areas>Escrow Account for Sales Deposits See Also

[Setup](#_bookmark199)

[Deposit Drawdown](#_bookmark200) [Deposit Insurance](#_bookmark201)

## Purpose

In residential developments, it is common for the purchaser to place a deposit in trust with a third party such as an escrow agent or a lawyer. This prevents early access to the funds by the developer and protects the purchaser until the unit is contractually complete. However, in certain countries or regions, legislation allows the developer to access the deposit monies prior to completion to use towards the costs of development.

The Escrow account can hold deposits outside the cash flow, ensuring there is no impact on the project until they are released under the terms of the purchase contract. Alternatively, deposits can be released as soon as they are collected and used to fund development costs.

The Escrow Account has the following features:

* Calculate the amount of deposits collected to use as a source of funds
* Calculate interest on deposits held for both the purchaser and the developer
* Drawdown schedule to place deposits in the cash flow
* Guarantee and insurance charges for early use of deposits
* Works with both basic and structured finance

Before the Escrow account can be used, ensure residential deposits are entered through the Unit Sales schedules. Also see, Residential Sales. By default, when a new project is created or is imported from an earlier version, sales deposits are automatically placed in the Escrow account and held outside the project cash flow until contractual completion. This behaviour is described in the Escrow Account topic in the Project Cash Flow section.

Note: When a project created in an earlier version is imported, KPIs will remain unchanged even though deposits have been moved to the Escrow account.

You can determine how much of the deposits can be used as funding in the project Cash Flow for each individual phase.

The Sales Deposits window displays the current selected phase in the title bar. Note: Merged Phases selection defaults to the first phase.

View in Project Cash Flow

Go to Project Cash Flow>Escrow Account>Deposits Received>Escrow Account.

### Toolbar

Edit

* Save Changes and Close
* Cancel Changes and Close

View

* View Financial Data
* Move Up
* Move Down

Toolbar

* Add
* Delete
* Copy
* View Financial Data
* Move Up/Down

### Setup

Deposits in Escrow Calculation Method Choose from:

* % of Deposits/Interim Sales
* % of Gross Sales
* % of Total Development Costs Gross Sales

Type an amount.

Assumed Pre-Sales % Type a percentage.

Assumed Pre-Sales Type an amount.

% of Deposits Available Type a percentage.

Deposits Available Type an amount.

Deposit Release

You can control when deposits are released. For example, you can limit the use of escrow deposits to the payment of development costs until construction is completed.

Earliest deposit release date

The default is Project Start Date. Click the ellipsis to type/select a date. This restriction allows no drawdown until the specified date.

Drawdown amount can't exceed construction costs during construction period

Click the checkbox to restrict the drawdown amount so that it cannot be greater than construction costs during the construction period. Setting up the cap means that surplus Escrow deposits cannot be released into the cash flow as income for that phase until construction for that phase has been completed. If there are no development costs in a phase and the cap is in effect, no deposits are withdrawn until construction is complete for that phase. It is not possible to withdraw more than the development cost in any period by creating multiple deposit drawdowns in the same period.

The cap can be used in conjunction with any of the following drawdown methods:

* % of period deposit
* % of total deposits
* Fixed amount

You will see the results on the Deposits Used row of the Project Cash Flow report. For more information, see Project Cash Flow report.

Minimum deposit balance as % of total deposits

Type a percentage. The default option is 0.00%. This restriction requires the deposit balance to be equal or greater than this percentage times the total deposits amount.

Minimum balance amount

Calculates the amount based on the percentage you entered into the Minimum deposit balance as % of total deposits field.

Maintain minimum balance until

The default is Project Start Date. Click the ellipsis to type/select a date. This gives you control over the period for the required minimum balance.

Interest on Escrow

Interest Rates on Deposits Received Choose from:

* Ignore
* Interest Set

Interest Rates on Deposits Received Choose from:

* Ignore
* Interest Set

Interest Rates on Deposits Used Choose from:

* Ignore
* Interest Set Compounding Choose from:
* Monthly
* Quarterly
* Six Monthly
* Annual Rate Type Choose from:
* Effective
* Nominal

### Deposit Drawdown

Heading

Type in a name.

Type

Choose a way to use the deposits as funding:

* **Fixed Amount:** Makes available the amount you type in the Rate field and define in the Detail Columns.
* **% of Total Deposits:** Makes available the percentage you type in the Rate field. This percentage is multiplied by the total deposits.
* **% of Deposit Receipts:** Makes available the percentage you type in the Rate field of the deposits collected in one month. Note: This amount cannot exceed the amount in Setup>Deposits Available either on a monthly or total basis.
* **Remaining Balance:** Makes available the balance after all other deposit drawdown line items are subtracted from the Deposits Available.

Note: If any remaining balances are available, you must add the Remaining Balance as an item or else the Project/Proforma Summary displays the message that the Cash Flow and Summary are different.

Selection

Auto displays your selection from the Type field.

Rate

Type an amount/percentage.

Total

Auto calculates the total based on the Type and Rate fields.

Timing

Type/select a timing period:

* Choose a **Start Of** period.
* Type/select an **Offset by** number of months. Default is 0.

Notes

Type any notes for this deposit drawdown.

Cost Type

Select a cost type.

Inflation Growth

Type an inflation growth rate.

VAT Rate

Type a VAT rate.

Impact

Escrow Account section.

### Deposit Insurance

Add Deposit Insurance as a Fixed Amount

1. Add new item.
2. Type a **heading**.
3. Select a **Fixed Amount** in the **Type** field.
4. Type the **rate** to charge.
5. Select a **frequency** in the **Repeat Cycle** field.
6. Click the ellipsis in the **Timing** field. Result: Data Distribution Pop-Up appears.
7. Type **months** for Duration and click **OK**.
8. Project Cash Flow screen displays.

Add Deposit Insurance as a % Deposit Drawdown

1. Add new item.
2. Type a **heading**.
3. Select **% Deposit Drawdown** in the **Type** field. Result: Deposits Available is used as the basis.
4. Type the **rate** to charge.
5. Select a **frequency** in the **Repeat Cycle** field. Option: Select **none** to not repeat..
6. Click the ellipsis in the **Timing** field. Result: Data Distribution Pop-Up appears.
7. Type **months** for **Duration** and click **OK**.
8. Project Cash Flow screen displays.

Add Deposit Insurance as a % Deposit Available

1. Add new item.
2. Type a **heading**.
3. Select **% Deposit Available** in the **Type** field. Result: Deposits Available is used as the basis.
4. Select **% of Deposits** as the **Deposit Basis**: Option: Fixed Amount.

Option: Rate/Unit.

1. Click the **Selection** ellipsis.

Result: Sales Unit Selection Pop-Up appears.

1. Click the checkbox for each line item to **include**.
2. Click OK.
3. Result: Pop-Up disappears.
4. Type **rates** in the Deposits and Detail Columns sections.
5. Select a **frequency** in the **Repeat Cycle** field.
6. Click the ellipsis in the **Timing** field. Result: Data Distribution Pop-Up appears.
7. Type **months** for **Duration** and click **OK**.
8. Project Cash Flow screen displays.

## Options for Capitalised Rent and Unit Sales

Navigation: Home Ribbon>Definition>Capitalised Rent>Ellipsis>Popup Ribbon>Options

### Monthly Rent Rates

Rents are normally entered as annual payments. In some European countries, rent rates are expressed as monthly rates. Both the Rent rate and the MRV per Unit can be specified as monthly rates.

When you change the rate basis between annual and monthly, all annual rates will be expressed as monthly rates. The Gross Rent and Capital Value will remain unchanged.

**Note:** This setting affects rents across all phases. To use monthly Rent and MRV rates

1. Tick the **Monthly Rent Rate** option on the Options menu.
2. Confirm the change by clicking the **OK** button.

### Lock Gross: Net Ratio

The Gross

Net area ratio can be fixed so that all area records maintain a fixed ratio between the gross and the net areas. This setting makes entering area information easier – you need enter only one of the area measurements for the program to automatically calculate the other.

To lock the Gross to Net ratio

1. Select Assumptions > Lock Gross: Net Ratio.
2. Select the **Lock Gross:Net Ratio** option.
3. Enter the fixed ratio you want to maintain between the areas into the **Gross:Net Ratio % field**.
4. Click the **OK** button.
5. In the confirmation window, choose from the following options:

|  |  |
| --- | --- |
| **To** | **Do This** |
| Apply the locked ratio to any new area definitions. | Select the **To NEW areas only** radio button and click on the **OK** button. |
| Apply the locked ratio to every existing area definition and to all new definitions. | Select the **To ALL area definitions** radio button and click on the **OK** button. |
| Cancel the locked ratio setting. | Click on the **Cancel** command button. |

To change the net area when the gross area is entered Select Options > Ratio - Change Net Area.

To change the gross area when the net area is entered Select Options > Ratio - Change Gross Area.

### Valuation Tables

The valuation tables are used in the calculation of the factors used in the capitalised rent calculations. In most cases, the **Annually in Arrears** option is used but in UK valuations, other options are often used. The default setting is Annually in Arrears.

To choose a valuation table method

1. Select **Tables** from the Valuation menu.
2. Choose one of the table types.

The capital values will be re-calculated automatically when the table type changes. Rent Free Methods

You can change the method used to value rent free periods from the Valuation menu.

**Note:** The Rent Free methods are not available for selection when the Tenant Rent Flow option is active. When this option is active, the method used is always *Defer start of rent flow*.

To change the rent free cost method

1. Select **Rent Free Methods** from the Valuation menu.
2. Choose one of the rent free methods.

The rent free costs will be re-calculated automatically when the method changes.

### Tenant’s Income Stream

Each tenant lease can generate a stream of annual rent which is entered as a separate line item in the cash flow. This income is subject to rent reviews and lease renewals. It is capitalised on the sale date of each tenant lease.

When this option is not active, the leasing and the capitalisation are assumed to take place on the same date. Although inflation/growth is factored into the rental value and capitalisation, no rent reviews are considered.

To enable the flow of rent

1. Select the **Tenant’s Income Stream** option on the Valuation menu.
2. The rental income and capitalised rents are recalculated.

To disable the flow of rent

1. Deselect the **Tenant’s Income Stream** option on the Valuation menu.
2. The annual and capitalised rents are re-calculated.

### Imperial and Metric Unit

The program can work with two different measurement systems – Imperial and Metric. A conversion function allows you to work with either system by recalculating each area record – gross and net measurements and Rent/Sales/Construction rates. Any costs or revenues that have been calculated on a rate/ft2 or rate/m2 are also included in the conversion calculations.

During the conversion process, small discrepancies can be created due to metric area measurements and rates being stored with two decimal places.

To change between measurement systems

Select Tools > Convert to Metric or Tools > Convert to Imperial.

Save Zero Value Items

This is for setting up templates. If you want a template that has fees related to items in the area schedule, you first need to create the items in the area schedule and then populate the cash flow with them. You will most likely not be entering any costs or rents/sales into the schedules at this stage - only zeros. ARGUS Developer will not save zero items in the schedule into the cash flow, so you check Save Zero Items in the area schedule to get ARGUS Developer to show zero area-based cash flow lines.

Name Area Tabs

You can name individual areas such as (for example) Unit 1, Unit 2. This option allows you to choose whether these headings appear on the area tabs for reference.

Stepped Base Rent Rate = MRV Rate

If this is activated, the first step of the selected Stepped Rent Profile on the base date is used as the Market Rent Rate.

Allow Negative Rents

In most projects, you will be working with Positive Rents. In some circumstances, it may be necessary to enter negative rents in order to capitalise a cost.

Use this option to allow entry of negative amounts. Menu Options for Displaying and Selecting Columns

The Quick Area Schedule includes all the data entry fields necessary for creating tenant or unit sales records. To enable easy entry of data, the schedule is divided into several bands of columns, each of which is the equivalent of the tabs in the detail view. There is also a band available for you to customise to include any fields you want.

To select the columns that you wish to see displayed in the Areas, Construction, Rent and Capitalisation or Areas, Construction and Unit Sales schedules, you can use the following menu options:

Selecting all columns

Use the **Columns > All** menu option to display all columns.

### Construction Costs columns

Use the **Columns > Construction and Columns > Construction Financial** menu options to display the construction cost columns.

Rent columns

In the Areas, Construction, Rent and Capitalisation form, use the menu options to display all rent columns (options available are Rent, Rent Financial, Turnover Rent and Rent Capitalisation).

Hotel columns

In the Areas, Construction, Rent and Capitalisation form, use the Columns > Hotel menu option to display all hotel-related columns.

Operated Asset columns

In the Areas, Construction, Rent and Capitalisation form, use the Columns > Operated Asset menu option to display all operated asset-related columns.

Lease Details columns

In the Areas, Construction, Rent and Capitalisation form, use the menu options to display all lease details columns (options available are Lease and Ground Lease).

Sales columns

In the Areas, Construction and Unit Sales form, use the menu options to display the sales columns. You can select Sales, Sales Deposits, Sales Fees, and Sales Financial columns.

Custom columns

Use the **Columns > Custom** menu option to display the custom columns (if any have been defined).

To choose the specific custom columns that will be displayed in the schedule, use the **Columns > Column Selector** menu option to open the Custom Column Selector window:

Select all the custom columns that you wish to include in the Areas, Construction, Rent and Capitalisation or Areas, Construction and Unit Sales schedule.

If you wish to check all options, use the **Columns > All On** menu option.

If you wish to uncheck all options, use the **Columns > All Off** menu option.

To accept your settings and exit from the window, you can either click the **OK** button, or use the **Columns > Save Changes & Exit** menu option.

## Operated Assets

Navigation: Home Ribbon>Definition>Operated Assets

The Operated Assets valuation module is an optional feature within ARGUS Developer. You may need to purchase a licence for this module before you can start working with operated assets.

The Operated Assets module allows you to specifically focus on managing rent and occupancy rates for business premises, including hotels, golf courses, marinas, serviced apartments, self storage and so on.

**Note:** Once you have set up any operated assets, you may wish to create a report of the data you have entered. An Operated Assets report is available in the Enhanced Reports section of the reporting module.

### Using Operated Assets

To quickly access operated assets when you only want to create or edit data, select the Operated Asset command in the Definition group on the Home tab.

To create and then capitalise operated assets

1. Select the **Capitalised Rent** command in the Definition group on the Home tab.
2. Change the Use Type to one of: Amusement Park, Golf Course, Marina, New Hotel, or the generic Operated Asset. The Rent tab is replaced with the Operated Asset tab.
3. Click the **Click to View Operated Assets** hyperlink.
4. Create or edit a profile then close the operated asset screen.
5. In the Operated Asset tab, select the name of the profile in the drop-down list of the **Occupancy/Rates Profile** field.
6. Enter a cap rate to capitalise the net operating income.

To create operated asset profiles

1. Click the **Click to View Operated Asset Profiles** hyperlink.
2. Click the **Add New Profile** command.
3. Click the **Rename** command and enter a new name.
4. Enter Occupancy and Rates tables.
5. Enter operating revenues and expenses.

To copy an asset profile

1. Select the profile name in the drop-down list of the **Name** field in the Asset Profile group.
2. Select the **Copy Profile** command.

To delete an asset profile

1. Select the profile name in the drop-down list of the **Name** field in the Asset Profile group.
2. Select the **Delete Profile** command.
3. The profile will be deleted, along with any references to it in any area records.

### Occupancy and Rates Tables

The Occupancy and Rates tab allows you to enter the types of variables required to calculate the base income and operating revenues and expenses for a business operation. The types of variable are predefined and are listed in the table below. This tab holds an unlimited number of different pages of data, each page representing a single variable type. For example, in a hotel, you would have the number of rooms, occupancy rates and average daily room rates.

Each page holds rates that change month by month and year by year. For simple operations, this may be percentage occupancy rates and average daily room rates. For more complex operations such as a marina, where many different variables are used, there could be dock length, monthly rate/ft and % occupancy.

The start date of Operated Asset Pages is (by default) the month of the commencement of the Income Flow (Stage 6 in the current Phase); therefore, if you change the timing of this stage, the page time frame will change also. You can also force the start date of the pages to begin in January of the calendar year in which the period begins - but this is not as flexible as the default method.

To select the method you wish to use:

1. Click the **Home** tab.
2. Click the expansion button from the bottom right corner of the **Options** section.
3. Check or uncheck the **Begin Occupancy and Rates at Start of Income Start Timing** option.
4. Click **OK**.

The profile requires you to enter each variable type required as a page in a notebook. When adding a page, you will be asked to specify what type of variable it will be used for, the page name and the number of decimal places required for the data. The variable types are:

|  |  |
| --- | --- |
| **Variable Type** | **Description** |
| Occupancy Rates | This is used to specify the monthly occupancy of the operated unit as a percentage. |
| Available Units | This is used to specify the number of units available per month. |
| Average Daily Rates | The daily rate charged for occupancy of the unit. To calculate the monthly charge, the program multiplies the daily rate by the number of days in each month. From month to month, the number of days changes and this is reflected in the calculation. |
| Average Weekly Rates | The weekly rate charged for occupancy of the unit. To calculate the monthly charge, the program multiplies the weekly rate by the number of weeks in the month. This is done by dividing the number of days in each month by seven. From month-to-month, the number of days changes, and this is reflected in the calculation. |
| Monthly Rates | The monthly rate charged for occupancy of the unit. |
| Daily Activities | Used where calculations are based on the number of times per day an activity takes place. To calculate the monthly charge, the program multiplies the Daily Activities by the number of days in the month. |
| Weekly Activities | Used where calculations are based on the number of times per week an activity takes place. To calculate the monthly charge, the program multiplies the Weekly Activities by the number of days in the month divided by seven. |
| Monthly Activities | Used where calculations are based on the number of times per month an activity takes place. |
| Measurement - Linear | Used where calculations are based on the length of the occupied unit. For example, in a marina, charges may be made based on the length of the dock in which a boat is kept. |
| Measurement - Square | Used where calculations are based on the area of a unit. |

Working with Occupancy and Rates Tables

You can create an unlimited number of description tables for a profile. The tables each describe a different time-based variable or constant that can be used to calculate operating revenues and expenses.

Each of asset description tables holds a year-based schedule containing whatever type of data you have specified in the page properties. You can add one, five or ten years’ of rates by clicking the **New Operating Period** command in the Operating Period group.

**Note:** Adding an operating period to one table will add the same operating period to all other tables in the profile. The Year label will automatically increment to show the year (for example, if the current year is 2008, the first entry would read 1 - 2008, the next entry 2 - 2009 and so on).

**Note:** You can change the data type for a page at any time by right-clicking on the page and selecting Page Properties from the popup menu.

To create an operated asset description

1. Click on the **New Asset Description** command in the Options group.
2. Select from Occupancy Rates, Available Units, Average Daily Rates, or Other.
3. If you selected Add Other, enter a page description, choose a page type and the number of decimal places.
4. Click the **OK** button.
5. A new page in the editor is created with the page properties you just defined.

To delete an asset description

1. Select the asset description by clicking into its table.
2. Select the **Delete Asset Description** command.
3. The description table will be deleted, along with any references to it in the Operating Revenues and Expenses tab.

To copy an asset description

1. Select an asset description by clicking into its table.
2. Select the **Copy Asset Description** command.
3. The copy of the asset description will be added to the end of the notebook.

To move an asset description to another position

1. Select the asset description tab, left-click with the mouse and hold down.
2. Drag the tab to the place you want it to be and release the mouse button.

To extend the operating period

1. Select the **New Operating Period** command.
2. From the drop-down menu, select 1, 5, or 10 years
3. The years will be added at the end of the current operating period – i.e. the end of the table.

To shorten the operating period

1. Select the year that you want to delete by clicking into any month cell.
2. Select the **Delete Operating Period** command.
3. The table will adjust to shift all years up through the table.

To fill a year with a single rate

1. Select the Average cell in the year you want to fill.
2. Enter the rate into the Average cell – it will then copy to all months in the same year.

To fill the current year with the current month’s rate

1. Select the rate that you want to use to fill other cells.
2. Select the **Fill Row** command.

To fill to the end of a column with the current month’s rate

1. Select the rate that you want to use to fill other cells.
2. Select the **Fill Down** command.

To fill to the end of a row with the current month’s rate

1. Select the rate that you want to use to fill other cells.
2. Select the **Fill Right** command.

### Operating Revenues/Expenses tab

This tab is used to generate the base income, operating revenues and operating expenses for the operation.

An operated asset usually has several sections of cost categories, each of which can be based on other sections or calculated from the page variables defined on the Occupancy and Rates tab.

Developer allows an unlimited number of sections and, within each section, an unlimited number of operating revenues or operating expenses.

Revenue and Operating Expense Sections

Each of the sections can hold either revenues or operating expenses.

The following columns are displayed in this section of the Operating Revenues/Expenses tab:

**Heading** – this is used to identify the section in the cash flow and reports. It will also be used when the section is used as the basis for other calculations such as section summaries, section differences or percentage of section total.

**Type** – used to identify what the section contains: Revenue, Expense, Section Summary or Section Difference.

When a revenue item or an expense item is added to the Operating Revenue and Expense Detail part of this tab, the **Type** will be used to automatically set the new item’s Cost Type.

**Note:** If you change the **Type** from Revenue to Expense and vice versa, the program will change the “Cost Type” entries in the section below, after confirming that you want this to happen.

Summary and Difference sections can also be used as the basis for other calculations. You might want to base some operating expenses on a Departmental Profit section, which is itself based on one or more other sections.

* **Section Summary** - This type of section is used to add together each of the revenues or operating expenses in other sections. The calculation produces a new section, containing a copy of the revenues and operating expenses from each of the selected sections. When these are written to the cash flow, they will be grouped on the category code assigned to each revenue and operating expense item.
* **Section Difference** - This type of section is used to subtract one or more sections from each other. The calculation produces a new section, grouped on the category code assigned to each revenue and operating expense item.

**Selection** - for Section Summary or Section Difference, this is used to identify which other sections will be added or subtracted to calculate the new section.

**Detail** – use this check box to specify whether the Section Summary or Section Difference will contain a full detailed list of each of the items summarised or subtracted (if checked), or whether a single total line will be calculated (if left unchecked).

**Visible** – use this check box to specify whether the Section Summary or Section Difference will appear in the cash flow. It may be that these types of section are included only for calculation of other operating expenses, in which case they would not be shown in the cash flow.

Operating Revenue and Expense Detail

Each section can hold an unlimited number of either revenues or operating expenses:

**Heading** – used to identify the item in the cash flow and on reports. It is also used when the item forms the basis for another calculation such as the percentage of another item.

**Cost Code** – used mainly by Snapshot users for accounting purposes. See also, Cost Codes.

**Department Category** – used mainly in the calculation of Section Summaries and Section Differences as outlined above.

**Calculation Type** – used to specify the method used to calculate monthly revenues or expenses in the cash flow. Depending on the method chosen, you may be required to enter a **Rate** or make a selection of sections or categories from a popup window.

See Also

[Calculation of Monthly Amounts](#_bookmark204)

**Rate Type** – For most calculation types, the Rate Type will be either Single or Variable.

If Single is chosen, the **Rate** field allows you to enter a single rate for the entire projection period. If Variable is chosen, the **Rate** field expands to allow you to enter a table of rates that change month by month over any number of years.

There are two calculation types that have different options for the Rate Type: Amount / Occupied Asset and Amount / Available Asset. For these calculation types, Developer needs to know whether the Rate Type is Daily, Weekly or Monthly.

If a Daily, Weekly or Monthly rate type is chosen, the **Rate** field allows you to enter a single rate for the entire projection period.

If a Daily Variable, Weekly Variable or Monthly Variable rate type is chosen, the **Rate** field expands to allow you to enter a table of rates that change month by month over any number of years (example shown here is for Daily Variable Rates):

Use this window to specify the pattern of rates throughout the year. Depending on the options you selected in the drop-down lists of the **Calculation Type** and **Rate Type** fields, you will be able to enter either an amount or a percentage.

**Selection** – this field is enabled for the following Calculation Types:

* Base Income
* Other Income
* % of Section Total
* % of Line Item
* Amount/Occupied Asset
* Amount/Available Asset
* Amount per Unit
* Amount per Activity
* % of Section Total (Net)
* Rate per Linear measure
* Rate per Square measure

Use the popup selection editor to choose which sections, categories or pages of rates will be used for the calculation:

**Expense Type** – Allows you to select a cost type (either a Revenue or a Cost).

**Inflation/Growth Set** – this is used for growing revenues and inflating expenses.

**Cap Method** – the **Cap Method** is used to select which items will be included in the capitalisation of net operating income. The default method Tenant Rate is automatically selected when a new line item is created.

|  |  |
| --- | --- |
| Type | Description |
| None | No capitalisation of the operating revenue or expense. |
| Tenant Rate | Capitalises the operating revenue or expense using the cap rate on the area record. |
| Private Rate | Capitalises the operating revenue or expense using a rate entered for this item. |

See Also Capitalisation Method

**Capitalisation Rate** – the private rate used to d using the **Cap Method** option in the Revenue and Expense profiles. Choose either Tenant Rate or Private Rate to capitalise the item.

Tenant Rate will pick up the capitalisation rate from the area record to which the profile is attached. Private Rate will enable you to enter a manual capitalisation rate for the item.

When capitalising, Argus Developer projects for one year beyond the sale date to establish stable revenues and expenses. It will then use this projected years’ worth of figures to capitalise the net operating income.

You must choose a capitalisation rate for each item of revenue and expense to ensure that the correct net operating Income is capitalised.

This is the same approach as that used in Additional Rent/Sales where each item can be included or excluded from capitalisation. This may or may not be necessary for the valuation of the operated assets so may change in the future to have a single capitalisation option for the entire profile.

## Use Classes

Navigation: Configuration Ribbon>Configuration Templates>Use Classes

ARGUS Developer allows all rent and sales area definitions to be classified into various categories known as Use Classes. A use class can be recorded against each tenant or property entered in the Area Schedules. The program comes with a fixed, or standard, template of use classes that are suitable for most development projects. If the standard template is not descriptive enough for the kinds of developments you do, you can customise the list of use type classes to include an unlimited number of additional descriptions. The list of use classes is saved with each project data file. This ensures that your use classes are available to anybody else that opens the data file. To view or create new use classes, select the **Use Classes** command on the Configuration tab.

To create custom use classes

1. Make sure that Developer is not being used by anybody other than you, otherwise any changes you make will not be saved.
2. Select User-defined Use Classes in the drop down list
3. Click the **Add a new use type** command on the tool bar and enter its name
4. Choose a Calculation Type from the drop-down list in the table To delete custom use classes
5. Make sure that Developer is not being used by anybody other than you, otherwise any changes you make will not be saved.
6. Select User-defined Use Classes from the drop-down list
7. Click **Delete the selected use class** command on the tool bar and confirm by clicking the **OK** button
8. Any area records that use this use class will be changed to the Undefined use class

# Entering Costs and Receipts

## Definition (Editing Costs and Receipts)

Navigation: Home Ribbon>Definition

## Purpose

After you setup the calculation assumptions and enter project time scale, you can create the cost and revenue elements that define the next steps in the project.

As the name suggests, the Definition screen is where you go to enter costs and revenues. It shows, at a glance, the numerous inputs for each cost and revenue category. The screen is laid out with group boxes that group all the similar categories together. Moving through the group boxes is a logical and easy way to enter the full range of costs and revenues for a project.

* When Single Phase is selected, the data fields display the rate for each cost or revenue.
* When Merged Phases is selected, the data fields display the sum of all the individual elements from each phase.
* Type costs and revenues into the Definition screen in the adjacent fields or click the ellipsis buttons to enter a detailed record in the popups.
* Any data you enter in this screen or via the ellipsis popups automatically generates a timed cash flow that can be inspected and modified in the Project Cash Flow screen.

Data Fields

One-off costs or fees can be entered directly into the data fields with a light background. To enter a list of costs of the same type, or a single cost that requires entries in multiple periods, you will need to open up its editor.

## To open an editor

1. Click the ellipsis button, or press the SPACE bar, to expand the field.

## To change the data field layout

#### Select the File tab > Control Panel > Preferences > General tab.

1. Change the number of columns using the Number of Columns for Definition Items editor.
2. Change whether the fields are left-aligned or centred using the **Panels are centred within workspace** option.

Definition Data Editors

Many of the cost fields on the Definition screen use the same style of editor to create and change the data values. When you know how to use an editor for one category of cost, you will be able to use the same methods for most other costs.

When you open the editor, you’ll find that there is already one element created for you. All you need to do is fill in the boxes and click the **OK** button – the program now takes the data element, and from it, generates a timed cash flow.

You’ll see that the element already has some of its values filled in. The program creates each new element with a set of default values. This saves time when entering costs, as you need provide only the minimum of information each time.

You can change the default details by making selections in the table, as shown below.

## Creating and Editing Items

Navigation: Home Ribbon>Definition>Stamp Duty

You can add an unlimited number of items to any of the schedules. Use the **Add** and

**Delete** commands to maintain the list of items – either costs or revenues.

To add a new item

1. Click the **Add New Item** command.
2. Enter the heading.
3. Select a Type which determines how this item will be calculated.
4. For related types, select the source items in the **Selection** field.
5. Enter the fixed amount or rate in the **Amount** field.
6. Make any changes to the timing using the **Repeat** or **Timing** fields.

To delete an item

1. Select the item you want to delete by clicking into any field.
2. Select the **Delete Item** command.

To delete an item, select the item you want to delete by clicking into any field. Select the

**Delete Item** command.

To delete all items

1. Select the **Delete All Items** command.

All items will be removed from the editor, cash flow and reports. It will also be removed from any % Relation selections created by other items.

To duplicate an item

1. Click the drop down for **Duplicate selected item** command.
2. Select **Duplicate Once**, **Duplicate Five Times**, or **Duplicate Ten Times**.
3. Results: Line items duplicate according to selection.

To move an item

1. Select the item you want to move.
2. Select either the **Up** or **Down** command.

Specifying Calculation Methods

The schedules allow you to calculate the amounts for each item using a variety of different methods. This section shows you how to enter these methods.

To add a fixed amount item

1. Select Fixed from the **Type** drop-down.
2. Enter the amount into the **Amount** field.

To relate to another item using a percentage

1. Select the item you want to relate.
2. Change its type to Related %.
3. Open the Selection field and check the options against the item you want to relate to.
4. Enter the percentage rate in the **Amount** field.
5. The related item will be calculated as a percentage of the total of each individual source item.

**Note:** You can enter a rate up to 10,000% for situations where you are multiplying a selection or other items by a factor of 1 to 100.

To relate to a gross or net area

1. Select the item you want to relate.
2. Change its Type to pf² - there are several different area measures to choose from.
3. Open the **Selection** field and change the Scope to include All Areas or Selected Areas.
4. Select any individual areas you want to relate to by checking the options in the browser.
5. Enter the rate/ft² in the **Amount** field.
6. The related item will be calculated as a product of rate multiplied by area for each individual source item.

To relate to a number of construction units

1. Select the item you want to relate.
2. Change its type to Rate/Unit.
3. If you want to relate to units in other phases, check the **Include Other Phases**

option.

1. Select any individual areas you want to relate to by checking the options in the browser.
2. Enter the rate/unit in the **Amount** field.
3. The related item will be calculated as a product of rate multiplied by number of units for each individual source item.

To relate to a land area

1. Select the item you want to relate.
2. Change its type to Rate / Gross or Net Land Area.
3. The **Selection** field changes to show the total land area (gross or net).
4. Select any individual areas you want to relate to by checking the options in the browser.
5. Enter the rate/land area in the **Amount** field.
6. The related item will be calculated as a product of rate multiplied by gross or net land area for the current phase.

To multiply a rate by a number of units

1. Select the item you want to relate.
2. Change its type to Multiply Rate by Units.
3. Open the **Selection** field and enter the Number of Units and Unit Description.
4. Enter the rate per number of units area in the **Amount** field.
5. The item will be calculated as the number of units x unit rate.

To repeat a cost at a regular frequency

1. Select Monthly, Quarterly, Semi-Annual, Annual, or Custom from the **Repeat Cycle** drop-down.
2. If a custom repeat cycle is entered, enter the frequency at which the cost is repeated – from 1 to 60 months.
3. If the cost is normally distributed over one of the development stages in Timescale & Phasing, it will be automatically distributed using the Repeat Cycle and Frequency.
4. If the cost is normally placed in a single period, you can change the timing and distribution using the method described in the next topic.

To change the start date, end date or distribution

1. Open the Data Distribution editor by clicking the **Timing** ellipsis button.
2. Select the **Custom Timing** option in the Custom Timing group on the Home tab.
3. Use the Start Date, Distribution and End Date group boxes to change the timing.

Entering Notes

The schedule has a field where you can enter free-form notes about each item. The notes can be multi-line, accept only plain text without any formatting, and can be of any length up to 4096 characters.

The notes can be printed as part of a report that lists each line in the cash flow – the Cash Flow Notes Report.

To enter notes

1. Click the **Notes** ellipsis button.
2. Enter the notes into the popup editor.
3. Click the **OK** button.

### Additional Financial Data

To make entering costs and revenues easier, each editor shows only the minimum number of fields. When you need to change some of the other options that affect how the item is calculated in the cash flow - inflation, interest or sales tax - there are some additional fields that you can use.

To show additional finance fields

1. Select the **View Financial Data** command.

A set of columns will appear at the end of the table. When you switch on this view, it remains set for all the other editors. You need make this change only once to see these additional fields.

### Cost Types

ARGUS Developer keeps the sum of all costs and of all revenues as two separate balances. In general, all costs are added to the cost balance and all revenues are added to the revenue balance.

There are some situations in which it is useful to make deductions from each of these balances, rather than adding to them. The program allows you to make these deductions through the **Cost Type** drop-down field.

To add to the total cost balance

1. Select Cost from the **Cost Type** drop-down.
2. The cost will be added to the balance of all cost types. This is the default setting and you won’t often need to change it.

To deduct from the total cost balance

1. Select Revenue (Reducing Cost) from the **Cost Type** drop-down.
2. The cost will be deducted from the balance of all Cost types.

To add to the total revenue balance

1. Select Revenue from the **Cost Type** drop-down.
2. The revenue will be added to the balance of all revenue types. This is the default setting and you won’t often need to change it.

To deduct from the total revenue balance

1. Select Cost (Reducing Revenue) from the **Cost Type** drop-down.
2. Instead of adding the cost to the balance of all cost types, it will instead be deducted from the balance of all revenues.

### Interest and Inflation

If you are working in the Basic Interest finance mode, there are two fields that allow you to set individual interest rates on each item. Inflation rates are always available, regardless of the finance mode.

To apply interest rates

1. Select the interest rate set from the **Interest Rates** drop-down.
2. Interest is calculated on the item in the finance calculations.

To ignore interest

1. Select the **Ignore Interest** option.
2. The item will be excluded from the interest calculations.

To apply inflation

1. Select the inflation rate set from the **Inflation/Growth** drop-down.
2. Inflation or Growth is applied to the item before it is used in the finance calculations.

### Sales Tax

Sales tax can be calculated automatically whenever a cost is incurred by using the two tax rate fields. The tax is calculated, and optionally recovered, using the settings made on the VAT screen.

To calculate sales tax for an item

1. Enter the rate of tax into the **VAT Rate** field
2. Wherever the cost incurred in the cash flow, its amount is multiplied by the tax rate and placed into a sales tax account.
3. Interest is calculated on the sales tax as part of the finance calculations.

To recover sales tax for an item

1. Enter the amount of tax that is recoverable into the **Recovery Rate** field
2. The proportion of tax recoverable is calculated for each recovery period and the sales tax account is reduced.

**Note:** If you can recover all the tax, enter 100%. If cannot recover any tax, enter 0%.

## Percentage Related Items

Navigation: Home Ribbon>Definition>Land & Acquisition>Stamp Duty>Selection>Ellipsis

Items that are related to others on a percentage basis can be easily set up in the definition editors.

See Also

Creating and Editing Items

When you want to change the default set up for a percentage related item, you will need to open the related items in the Selection editor by clicking the **Selection** ellipsis button.

To change what the item is related to

1. Select or uncheck the **Include** options in the table
2. The **Override** option at the top of the screen will be automatically checked.

To undo the changes it item selections

1. Un-check the **Override** option.
2. The selections in the Include column in the table will be set to default values.

### Calculation Basis

A related item’s amount is normally calculated as a straight % of the amounts in its selected item list. There are some occasions where you might want to calculate a fee on a grossed up or netted down basis. Changing the calculation basis will achieve this. The table below shows the effect of changing the basis.

|  |  |  |  |
| --- | --- | --- | --- |
| **Basis** | **Amount** | **Related**  **%** | **Total** |
| Straight | 10,000 | x 10% | 1,000 |
| Grossed up | 10,000 x 110% | x 10% | 1,100 |

|  |  |  |  |
| --- | --- | --- | --- |
| Netted Down | 10,000 / 110% | x 10% | 909 |

To change the relation calculation basis

1. Select Straight, Grossed Up or Netted Down from the **Basis** drop-down.

### Calculation Type

An item can be related to a range of other items using four basic methods:

1. A row to row relation, where an item is related to a range of other items. Its timing and distribution is aligned to its source range.
2. A period to row relation, where an item is related to a range of other items. Its calculated amount is placed in a single period and the timing is not linked to the source range.
3. A period to period relation, where an item is related to the same period across a range of other items. Its calculated amount is placed in a single period.
4. A row to row relation with a custom distribution, where an item is related to a range of other items. You chose its timing and distribution.

To relate a row to another set of rows

1. Select Match period by period to many rows from the **Type** drop-down.
2. Select the source items by checking the **Include** options.

To relate a period to another set of rows

1. Select Match to many rows from the **Type** drop-down.
2. Click the **Month** ellipsis button and enter a period from the **Date Picker**.
3. Select the source items by checking the **Include** options.

To change the relation calculation basis

1. Select Match period to period from the **Type** drop-down.
2. Click the **Month** ellipsis button and enter a period from the **Date Picker** field.
3. Select the source items by checking the **Include** options.

To relate a row to another set of rows with custom distribution

1. Select Match custom distribution to many rows from the **Type** drop-down.
2. Select the source items by checking the **Include** options.
3. Close the selection editor by clicking the **OK** button
4. Change the distribution using the Data Distribution editor.

To remove any relations and calculate zero amount

Select Not Related from the **Type** drop-down. The list of source items will be removed by automatically un-checking each **Include** option.

When you close the selection editor, you will be asked how the program should treat the item. You can either keep the percentage rate so that you can change the related source list in future, or you can convert the related item to a fixed amount and remove all related item options.

**Note:** You can change the item back to a related basis at any time.

Stamp Duty Related Items

Click the Selection ellipsis button to open the Purchaser's Cost Stamp Duty Selection for Stamp Duty types.

Scheme Name

Select the Stamp Duty scheme you want to use.

Phase

Displays the phase number.

Headings

Displays the heading.

Total

Displays the total calculated Stamp Duty total.

To see how it is calculated, see the ARGUS Developer Calculations Manual located within the installation folder or from: <http://www.argussoftware.com/argus-developer-> downloads/

Start Date

Displays the start date when Stamp Duty is applied.

Include

Click the check box to apply the Stamp Duty to the selected line item.

Override default related rows Click the check box to override.

Calculate related value based on Un-inflated Source Amount Click the check box to calculate.

Rate per Area Related Items

Items that are related to others on a rate/ft² or rate/m² basis can be easily set up in the definition editors. The calculations are based on the area definitions in the Capitalised Rent and Unit Sales area records using four different area descriptions:

* Gross Area
* Net Area
* Additional Area
* Alternate Area

See Also: Creating and Editing Items

To select areas that will be included in this calculation, click on the ellipsis button in the

**Selection** field.

To calculate on the total phase area

1. Select Apply to all areas in the drop-down list of the **Scope** field.
2. The Selected label changes to show the sum of all areas in the current phase.

To calculate on selected areas from a phase

1. Select Apply to selected areas from the drop-down list in the **Scope** field.
2. Choose the areas by checking the **Include** options.
3. The Selected label changes to show the sum of all selected areas in the current phase.

**Note:** You can use the **Select All** and **Deselect All** commands to quickly include all areas or clear the selections.

Rate per Unit Related Items

Items that are related to others on a rate/unit basis can be easily set up in the definition editors. The calculations are based on the number of units entered in the Capitalised Rent and Unit Sales area records.

See Also

Creating and Editing Items

To select areas that will be included in this calculation, click on the ellipsis button in the

**Selection** field.

To calculate on the total phase units

1. Un-check the **Include Other Phases** option.
2. Choose the units by checking the **Include** options.

To calculate on selected areas from any phase

1. Select the **Include Other Phases** option.
2. Choose the units by checking the **Include** options.

**Note:** You can use the **Select All** and **Deselect All** commands to quickly include all areas, or clear the selections.

Rate per Rent on Letting

Letting Agent and Letting Legal fees may be defined as a percentage of the Market Rental Value at the start of a tenant’s lease. The fee may be calculated on either the Gross or Net MRV.

To select tenants that will be included in this calculation, click on the ellipsis button in the

**Selection** field.

The default setting for this type of fee is to include all tenants. To include selected tenants only.

1. Select only the tenants you want to include.
2. Answer Yes when asked to override the fee selection.

To include all tenants

1. Un-check the **Override the default relation** for this fee option.
2. Answer Yes when asked to reset the fee selection.

To calculate on the Gross Market Rental Value

1. Close the tenant selection editor then the parent data editor.
2. Select the **Assumptions** command from the Calculation Assumptions group on the Home tab.
3. On the Calculations tab, check the **Gross MRV** radio button in the Letting/Rent Review Fees calculated on group box.
4. Click the **OK** button.

To calculate on the Net Market Rental Value

1. Close the tenant selection editor then the parent data editor.
2. Select the **Assumptions** command from the Calculation Assumptions group on the Home tab.
3. On the Calculations tab, check the MRV Net of Assumptions radio button in the Letting/Rent Review Fees calculated on group box.
4. Click the **OK** button.

Rate / Gross Land Area

Items that are related to the gross land area or the net land area can be easily set up in the definition editors. The calculations are based on a rate multiplied by the site area in the current phase.

See Also

Creating and Editing Items

To calculate a fee based on gross land area

1. Select Rate/Gross Land Area in the drop-down list of the **Type** field.
2. Enter the rate in the **Amount** field. To calculate a fee based on net land area
3. Select Rate/Net Land Area in the drop-down list of the **Type** field.
4. Enter the rate in the **Amount** field.

Related to Rent Review Dates

Rent Review Fees, which are payable on each lease review date during the cash flow projection period, can be easily set up in the definition editors. The calculations are based on a percentage rate multiplied Market Rental Value on review.

See Also

Creating and Editing Items

To enter a rent review fee

1. Select Related to RR Dates in the drop-down list of the **Type** field.
2. Click the ellipsis button in the **Selection** field.
3. Select the tenant names by checking the **Include** options.
4. Click the **OK** button.
5. Enter the percentage fee rate in the **Amount** field.

## Timing and Distribution

Navigation: Home Ribbon>Definition>Land & Acquisition>Fixed Price>Timing>Ellipsis

Navigation: Home Ribbon>Project Cash Flow>Ribbon>Distribution & Analysis>Data Distribution

When each item is created, its start date, end date and distribution are automatically assigned default values. The Time scale & Phasing inputs are used to create the item’s timed cash flow which can be inspected in the Cash Flow screen. The settings can be changed for any item, giving you full control over how the amounts distributed along the cash flow line.

As you change the timing and distribution options, the graph on the right side of the screen is updated automatically, giving you an instant overview of the timing and distribution.

### Timing

To change the timing of an item

1. Select the **Data Distribution** command, or click the **Timing** ellipsis button
2. Make any changes on the Data Distribution screen then save and close.
3. The changes will be reflected in the cash flow and the **Total** amount field, updated to include any inflation.

To reset the timing of an item to its default setting

1. Select the Undo option in the drop-down list in the Edit group on the Home tab.
2. Select the **Reset Timing** command.
3. Answer **Yes** when asked to confirm the reset.

To undo all changes made in the screen

1. Select the Undo option in the drop-down list in the Edit group on the Home tab.
2. Select the **Undo All Changes** command.
3. Answer **Yes** when asked to confirm the reset.

### Start Date

The start date of an item can be timed to a precise date or period, or, for tighter integration with the project time scale, it can start when either a phase or development stage starts or ends.

To start an item on a fixed date

1. Select the **Custom Timing** option in the Custom Timing group on the Home tab.
2. Select the **Date** button. The **Stage** field drop-down will be changed automatically to Manual Date.
3. Select the date using the **Date Spin** buttons, or the **Date Picker** command.
4. If the time scale of the project is changed, this item can maintain its fixed date, or move proportionally.

To start an item in a fixed period

1. Select the **Custom Timing** option in the Custom Timing group on the Home tab.
2. Select the **Period** radio button. The **Stage** drop-down will be changed automatically to Manual Period.
3. Select the period using the **Period** spin button.
4. If the time scale of the project is changed, this item can maintain its fixed period or move proportionally.

To start an item when a development stage starts

1. Select the **Custom Timing** and **Extended Timing** options in the Custom Timing group on the Home tab.
2. Select the name of the development stage from the drop-down list in the **Stage**

field.

1. Choose a phase in the drop-down list of the **Phase** field if you want the item to start based on the timing in another phase.
2. If you want the item to start when another stage finishes, select the End of option in the **Stage Timing** drop-down list.
3. If you want to adjust the timing to be earlier or later than the stage date, use the

**Offset** spin button to add a lead-in or a lag in months.

### Distribution

The distribution of data for any item can be controlled using a variety of automatic curve types built into the program. For the ultimate control, there is a cash flow option that allows precise placement of amounts and percentage values along a cash flow line.

To change the distribution method

1. Select the **Custom Timing** option in the Custom Timing group on the Home tab.
2. Select the distribution method in the drop-down list of the **Curve Type** field.

To create a weighted straight-line distribution

1. Select the Weighted option in the drop-down list of the **Curve Type** field.
2. Select the incline of the line from 0% to 100%.
3. 0% - 49% calculates a low-to-high incline, 50% calculates a flat incline, 51% to 100% calculates a high-to-low incline.

To calculate a distribution on a standard S-Curve

1. Select S-Curve from in the drop-down list of the **Curve Type** field.
2. The curve will be calculated automatically, building up its profile slowly at the start, increasing at a faster rate in the middle, and decreasing slowly towards the end.

To distribute for a fixed duration

1. Select the **Duration** radio button.
2. Enter the fixed duration using the **Duration** spin button.

To distribute for the duration of a development stage

1. Select the **Custom Timing** and **Extended Timing** options in the Custom Timing group on the Home tab.
2. Select the **Over Stage** radio button.
3. Choose the stage in the drop-down list of the **Over Stage** field.
4. Choose a phase in the drop-down list of the **Phase** field if you want the item to be distributed based on the timing in another phase.

To distribute to the end of a stage in a different phase

1. Select the **Custom Timing** and **Extended Timing** options in the Custom Timing group on the Home tab.
2. Select the **To End Date** radio button – the End Date group box below will become enabled.
3. Make any settings required for the end date using the methods described in the End Date topic below.

### End Date

The end date of an item can be timed to a precise date or period, or, for tighter integration with the project time scale, it can end when either a phase or development stage starts or ends.

To end an item on a fixed date

1. Select the **Custom Timing** option in the Custom Timing group on the Home tab.
2. Select the **To End Date** radio button in the Distribution group box.
3. Select the **Date** radio button. The **Stage field** will be changed automatically to

#### Manual Date.

1. Select the date using the **Date** spin buttons, or the **Date Picker** command.
2. If the time scale of the project is changed, this item can maintain its fixed date, or move proportionally.

To end an item in a fixed period

1. Select the **Custom Timing** option in the Custom Timing group on the Home tab.
2. Select the **To End Date** radio button in the Distribution group box.
3. Select the **Period** radio button. The **Stage** drop-down will be changed automatically to **Manual Period**.
4. Select the period using the **Period** spin button.
5. If the time scale of the project is changed, this item can maintain its fixed period or move proportionally.

To end an item when a development stage ends

1. Select the **Custom Timing** and **Extended Timing** options in the Custom Timing group on the Home tab.
2. Select the **To End Date** radio button in the Distribution group box.
3. Select the name of the development stage in the drop-down list in the **Stage**

field.

1. Choose a phase in the drop-down list in the **Phase** field if you want the item to end based on the timing in another phase.
2. If you want the item to end when another stage finishes, select the End of option in the drop-down list of the **Stage Timing** field.
3. If you want to adjust the timing to be earlier or later than the stage date, use the

**Offset** spin button to add a lead-in or a lag in months.

### Cash Flow View

The Cash Flow tab allows you to fine tune the way data is distributed along the cash flow line. You can see the amounts and percentage proportions for each period. A graph underneath the grid gives you a visual aid to see the distribution as you change amounts or percentages.

The purpose of this editor is to enable you to make changes to the distribution, not to the total amount. If you want to change the total amount, close the editor and make changes to either the rate or the related item selections.

To manually change the distribution

1. Select the Cash Flow tab.
2. Edit either the percentage or the amount

To automatically adjust other cells when you make a change

1. Select the **Maintain 100%** option in the Distribution group on the Home tab.
2. When you make any changes, the program can automatically maintain the correct total amount so that the distribution totals 100%. For example, you might make an up front payment to an architect and want the payments in other periods to reduce in proportion to the change.

To manually maintain a 100% distribution of value

1. Select the **Maintain 100%** option in the Distribution group on the Home tab.
2. Change any percentages or amounts by typing into the cells.
3. To ensure the total percentage is exactly 100%, right click into a cell and select the **Enter Outstanding %** command.

You can adjust the percentages or amounts in each cell exactly, without the program changing any other data. In this case, you must ensure that the total percentage distribution totals 100%.

To lock a period percentage or amount

1. Right-click in either the percentage or the amount cell.
2. Select the **Lock Cell** command.

You can lock a period so that its percentage or amount will not automatically change when other cells are edited. You can lock either the percentage or the amount but not both in the same period.

To unlock a period percentage or amount

1. Right-click in either the percentage or the amount cell.
2. Select the **Unlock Cell** command. To lock or unlock a range of periods
3. In the graph, click on the bar of the start of the range you want to change.
4. Hold the mouse button down and drag to the end of the range and release.
5. Select either the **Lock Cell** or **Unlock Cell** command.

### Custom Curve Distribution

If you want to create distributions where some of the data is distributed using a different curve type from the rest of the data, the Custom Curve Distribution will achieve this.

**Example:** You may have a cost that is, by default, distributed evenly across the cash flow but at the end, it is distributed on a quarterly basis. The program does not automatically handle this kind of distribution but you can create it using the procedure described below.

To create different distributions for the same item

1. Select the **Maintain 100%** option in the Distribution group on the Home tab.
2. Select the **Custom Curve** command from the Distribution group on the Home tab.
3. Select the range of periods over which you want the even distribution – click into the graph and drag to select the range.
4. Select the Monthly option in the drop-down list of the **Type** field.
5. Click the **Apply** button.
6. Select the range of periods over which you want the quarterly distribution – click into the graph and drag to select the range.
7. Select the Quarterly option from the drop-down list in the **Type** field.
8. Click the **Apply** button.
9. The graph changes when the **Apply** button is clicked. To distribute a fixed % over a range
10. Select the **Maintain 100%** option in the Distribution group on the Home tab.
11. Select the **Custom Curve** command from the Distribution group on the Home tab.
12. Select the range of periods over which you want the fixed % distribution – click into the graph and drag to select the range.
13. Click the **% Amount** button.
14. Enter the Percentage to Distribute.
15. Click the **Apply** button.

To distribute a fixed amount over a range

1. Select the **Maintain 100%** option in the Distribution group on the Home tab.
2. Select the **Custom Curve** command from the Distribution group on the Home tab.
3. Select the range of periods over which you want the fixed amount distribution – click into the graph and drag to select the range.
4. Click the **Amount** button.
5. Enter the **Amount** to Distribute.
6. Click the **Apply** button.

## Custom Label Descriptions

Navigation: Home Ribbon>Definition>Double Click an Item

You can change the labels used to describe many of the fields you see on the Definition screen. When you change a label, the change is immediately reflected in the Cash Flow, Summary, and Reports.

Changing a label can be done either directly on the Definition screen, or from within one of the data editors.

To change a label on the Definition screen

1. Select the label by double-clicking its name.
2. The **Change Label Value** radio button should already be selected.
3. Enter the new label description into the **Current Label** field.
4. Click the **OK** button.

To change the label for Fixed Price on the Definition screen

1. Select the label by double-clicking its name.
2. The **Change Label Value** radio button should already be selected.
3. Enter the new label description that will appear in the Definition and Cash Flow screens into the **Definitions & Cash Flow** field.
4. Enter the new label description that will appear in Reports into the **Reports** field. This may be different to the label on the Definition and Cash Flow screens.
5. Click the **OK** button.

To reset a single label to its default description

1. Select the label by double-clicking its name.
2. Select the **Reset Label Value** radio button.
3. Select the **Label Description** only radio button.
4. Click the **OK** button.

To reset all labels to their default description

1. Select the label by double-clicking its name.
2. Select the **Reset Label Value** radio button.
3. Select the All Label values in this project radio button.
4. Click the **OK** button.

**Note:** This option will reset all label descriptions in the project. To reset all custom labels to their default description

If you have custom label descriptions for individual data items in and editor, you can reset them all to the default description. For example, you may have a list of architect fees, each with different labels that you want to reset.

1. Open the data editor.
2. Select the **Change Label** command.
3. Select the **Reset Label Value** radio button.
4. Select the **Label Description Only** radio button.
5. Select the **Override any custom label changes** option.
6. Click the **OK** button.

**Note:** If you reset the labels using these options on the Definitions screen, the reset command will reset all labels, including any individual custom changes, for the project.

To change a label from a data editor

1. Select the **Change Label** command.
2. The **Change Label Value** radio button should already be selected.
3. Enter the new label description into the **Current Label** field.
4. Click the **OK** button.

# Acquisition Costs

Navigation: Home Ribbon>Definition>Fixed Price

This section describes the entry of all costs associated with the site acquisition.

## Acquisition Price

You can enter the Acquisition Price in one of three ways:

1. Set a residual target and let the program calculate the acquisition price automatically.
2. Enter the acquisition price directly into the **Fixed Price** field on the Definitions screen.
3. Click on the ellipsis button in the **Fixed Price** field then enter a schedule of known land acquisition prices. This method is useful where parcels of land are acquired separately, but where you still need a residual site value to complete the development. In this case, you will also need to set a Residual Target. See also Editing Costs and Receipts for more information on the Definition Editor.

Methods 1 and 2 assume that the acquisition cost will occur in the first period of the purchase stage defined in the Time scale and Phasing screen. As with all costs and receipts, however, you can reschedule the purchase to take place in any period of the cash flow.

* + If you have set a residual target, the acquisition price is calculated automatically and cannot be modified. A flag indicating Residualised Price will be shown next to the value.
  + If the acquisition price is known, you may enter the value in the **Fixed Price** field.
  + If you have entered a schedule of fixed acquisition prices, the **Fixed Price** field shows the total of all fixed purchases.

### System Calculated Land Price

ARGUS Developer allows you to calculate the land price and display that calculation in the Appraisal Summary. For example, land price/sm x sm. The following calculation methods are available for selection:

* + Fixed Amount
  + Related Percentage
  + Rate/sq ft Gross
  + Rate/sq ft Net
  + Rate/sq ft Alternate
  + Rate/sq ft Additional
  + Rate/Unit
  + Rate/Gross Land Area
  + Rate/Net Land Area
  + Multiply Rates By Units

### Fixed Acquisition Price

ARGUS Developer allows a mixture of residual and fixed land costs within each phase. You could set up the fixed acquisitions independently of any residual land cost. The fixed acquisition price schedule is intended for those types of development where parcels of land must be acquired separately in order to complete the acquisition of the entire site.

Any stamp duty and acquisition fees will be extended to include fixed land costs.

To enter the fixed land costs, click on the **Fixed Price** ellipsis button.

The fixed acquisition price editor is displayed, into which you can enter the periodic amounts for each plot purchase.

See Also: Editing Data

### Stamp Duty

This can be entered in various different ways:

* + Using customised bandings (see below for further explanation)
  + As a percentage of Acquisition Price
  + As a fixed amount
  + As a rate per square foot or meter
  + As an amount per unit

See Also: Editing Data

ARGUS Developer allows you to enter unlimited bandings where the basis of tax is a set of percentages based on stepped thresholds. To set up bandings, select the **Stamp Duty** command from the Templates group on the Configuration tab.

To Add a Scheme

Select the **Add Scheme** command. The cursor will be moved to the new row in the browser list. Enter a name for the scheme. The name will appear in any of the drop- down lists where a stamp duty scheme must be selected.

Lower Limit

This is the lower limit of land prices to which this band applies.

Upper Limit

This is the upper limit of land prices to which this band applies.

Percentage

This is the percentage tax rate that will be applied to any land price that lies between the lower and upper limits.

Cumulative

In some countries, the tax is a continual accumulation from one band to the next as opposed to a single percentage applied to the total value. By checking the Cumulative box, ARGUS Developer carries forward the amount from the last banding to the next

(Example: lower limit $0, upper limit $55,000, Percentage 0.5% [$55,000-$0] \* 0.005 =

$275 fixed amount carried through to next banding).

Fixed Amount

This figure is calculated from the previous banding and carried through to be added to next banding (see Cumulative explanation above).

Rounding

The Rounding Amount affects what land value is passed to the stamp duty calculation. The land value is rounded up to the nearest rounding amount to calculate the stamp duty.

Manual Cumulative Amounts

Select this box to enter a manual cumulative amount for the band.

To make all bands in a scheme cumulative

Select the **All Bands are Cumulative** command on the tool bar.

## To make all bands in a scheme Non-Cumulative

Select the **No Bands are Cumulative** command on the tool bar.

## To Delete a Scheme

Select the **Delete Current Scheme** command. The cursor will be moved to the new row in the browser list.

**Note:** If you open a .wcf file containing stamp duty schemes that are not currently saved in your master Stamp Duty file, the Unknown Stamp Duty Schemes window will be displayed. To update your master Stamp Duty file, check the schemes listed in this window and click the **OK** button. This will update the list of stamp duty schemes shown in the Stamp Duty Schemes window.

See Also

Unknown Stamp Duty Schemes

### Town Planning and Other Acquisition Costs

Town Planning, Survey, Agent Fee and Legal Fee costs can all be entered in this section of Definition. Please see Editing Data for further details.

### Other Acquisition Costs

A schedule is available for defining any other costs associated with the site acquisition. These can be defined as percentage related amounts or fixed amounts. Where a percentage related amount is entered, the value is related to the land cost.

Each cost will be placed at the beginning of the Purchase stage defined in the time scale.

See Also Editing Data

### Site Area

There are two fields for entering site measurements – Site Area and Net Land Area. The units of measurement for the site area fields can be changed using the **ARGUS** Button > Preferences > General tab > Land Measured In.

It is possible to calculate other costs from the site area and the net land area. The site area and net land area figures will be converted when changing between imperial and metric units.

# Construction Costs

Navigation: Home Ribbon>Definition>Construction Costs>Construction Cost

The Gross Construction cost is shown in this field. It is the addition of all construction costs in the Capitalised Rent and Sales schedules. You cannot edit this field.

By default, the Construction cost is distributed over the Construction stage defined in the time scale using the prevailing Construction curve type (see Distribution Assumptions for more information).

Below this, there are several different construction cost fields available, into which you can enter an unlimited number of items. The construction costs are:

* Contingency
* Demolition
* Landscaping
* Road/Site Works
* Statutory/LA
* Developers Contingency
* Other Construction
* Infrastructure Costs

To enter a single cost as a fixed amount Type the amount directly into the field.

To change the cost type or enter more than one cost Click the ellipsis button to open the Detail Editor.

Please see Editing Data for further details of the common controls in this editor.

## Cost Distribution

The following costs will be placed as a single amount in the first period of the Construction stage defined in the time scale:

* Demolition
* Road/Site Works
* Statutory/LA.

These costs will be distributed and the duration of the construction stage defined in the time scale using the prevailing construction curve type:

* Contingency
* Developer's Contingency
* Other Construction
* Municipal Costs.

### Other Construction Costs

Click on the **Other Construction** ellipsis button. You can enter any other construction- related costs into the Other Construction Cost schedule. Each cost can be specified in one of several ways:

* Fixed Amount: Interprets entry in the Amount field as a fixed amount
* Related %: Interprets entry in the Amount field as percentage
* Rate/ft2 Gross: Multiplies the total gross build area of selected tenants or properties in the Selection field by the entry, in square area, in the Amount field.
* Rate/ft2 Net: Multiplies the total net build area of selected tenants or properties in the Selection field by the entry, in square area, in the Amount field.
* Rate/ft2 Alternate: Multiplies the total alternate area of selected tenants or properties in the Selection field by the entry, in square area, in the Amount field.
* Rate/ft2 Additional: Multiplies the total additional area of selected tenants or properties in the Selection field by the entry, in square area, in the Amount field.
* Rate/Unit: Multiplies the number of units in the Selection field by the entry, in amount per unit, in the Amount field.
* Rate/Gross Land Area: Multiplies the entry, in amount per acre, in the Amount field by the gross land area
* Rate/Net Land Area: Multiplies the entry, in amount per acre, in the Amount field by the net land area
* Multiply Rate By Units: Multiplies the entry in the Amount field by the total number of units

See Also Editing Data

When a cost type is entered the other options are disabled, for example if you enter a fixed amount, the Rate/ pf2 (or Rate/ pm2), Area, Rate/Unit and Units cells are all disabled (see graphic above).

When a new item is created, it will automatically have professional fees attached to it. If you do not want professional fees to be calculated for the item, uncheck the **Allow Prof. Fee** option.

### Municipal Costs

Click on the **Municipal Costs** ellipsis button to open the Municipal Costs schedule. See Also

Editing Data

The same options apply in this schedule to the Other Construction Costs as detailed above.

## Infrastructure Costs

Navigation: Home Ribbon>Timescale & Phasing>Timescale

### Infrastructure Phases

Infrastructure components such as roads and services, which are normally completed before other phases are undertaken, can be defined in special Infrastructure Phases. The costs of constructing the infrastructure can then be automatically apportioned in different ratios to any of the subsequent development phases.

Once the allocations are set up between Infrastructure and Development phases, any changes to the costs in the Infrastructure Phases will be automatically apportioned to the Development Phases.

Infrastructure Phases are created just like any other phase in the Time Scale and Phasing window. A drop-down field called **Phase Data Type** allows you to indicate whether the phase will be used exclusively for holding Infrastructure Costs. When this check box is checked, the phase will no longer be available for selection in either a Project Phase Group or a Finance Phase Group.

If the phase is already included in a phase group, selecting Infrastructure Costs Only from this drop-down will automatically remove it from that phase group.

Phases identified as Infrastructure Phases continue to appear in the normal All Phases group when you are editing phases in the Timescale and Phasing window. However, when you have closed down the Timescale and Phasing window, Infrastructure Phases do not appear in the All Phases group. Instead they are grouped together under the All Infrastructure Phases group. This is to avoid the possibility of double-counting any costs.

Infrastructure Phases operate like any other normal phase and should be used for entering floor areas, site areas, unit numbers and costs. Do not enter revenues into an infrastructure costs, as they will be ignored when apportioning the costs to other phases.

### Allocating Infrastructure Costs

The costs of infrastructure can be allocated to the development phases using several calculation methods. The calculation methods available for allocating infrastructure costs are outlined in the table below.

|  |  |
| --- | --- |
| **Calculation Method** | **Description** |
| Proportion of Build Units | Takes the Total Number of Build Units in the selected Infrastructure Phases and divides it into Total Number of Build Units in a Development Phase to determine an allocation percentage.  The percentage is then multiplied against the total infrastructure costs in each period of the selected infrastructure phases.  The resulting periodic infrastructure costs are placed in the cash flow of the development phase. |
| Proportion of Gross Floor Area | Takes the Total Gross Area in the selected Infrastructure Phases and divides it into the Total Gross Area in a Development Phase to determine an allocation percentage.  The percentage is then multiplied against the total infrastructure costs in each period of the selected infrastructure phases.  The resulting periodic infrastructure costs are placed in the cash flow of the development phase. |
| Proportion of Gross Margin | Takes the Gross Margin in the selected Infrastructure Phase and divides it by the Total Phases Gross Margin to determine an allocation percentage.  The percentage is then multiplied against the total infrastructure costs in each period of the selected infrastructure phases.  The resulting periodic infrastructure costs are placed in the cash flow of the development phase. |
| Proportion of Net Floor Area | Takes the Total Net Area in the selected Infrastructure Phases and divides it into the Total Net Area in a Development Phase to determine an allocation percentage.  The percentage is then multiplied against the total infrastructure costs in each period of the selected infrastructure phases.  The resulting periodic infrastructure costs are placed in the cash flow of the development phase. |
| Fixed Percentage | Multiplies a manually entered percentage against the total infrastructure costs in each period of the selected infrastructure phases. The resulting periodic infrastructure costs are placed in the cash flow of the development phase. |
| Proportion of Site Area | Takes the Total Site Area in the selected Infrastructure Phases and divides it into Site Area of a Development Phase to determine an allocation percentage. |

|  |  |
| --- | --- |
| **Calculation Method** | **Description** |
|  | The percentage is then multiplied against the total infrastructure costs in each period of the selected infrastructure phases.  The resulting periodic infrastructure costs are placed in the cash flow of the development phase. |
| Proportion of Revenue | Divides phase revenue by project revenues (total or selected as described above) to calculate the correct proportion of revenue.  Applies the same proportion to infrastructure costs (total or selected as described above) to calculate the correct amount to be apportioned to the respective development phase.  Reflects any proportionate changes to revenues in the apportionment of infrastructure costs.  Example:  Phase 1 contributes 60% of total revenue; therefore, 60% of infrastructure costs are allocated to phase one.  If revenues increase to 70% of the total, the proportion of infrastructure costs allocated to phase one will also increase to 70%. |

To create an allocation in a Development Phase, use the Infrastructure Costs editor on the Definition page. This field is enabled only when a development phase is selected from the Phase tab bar.

To open the editor, click the ellipsis button.

The editor enables you to choose the Type of allocation, which Infrastructure Phases you want allocate from, plus change any timing or enter notes.

If you either over allocate or under allocate the infrastructure costs, warnings will be automatically shown in the Data Selector. These warnings will indicate which infrastructure phases have not been 100% allocated, and which of the development phases has contributed to the over or under allocation.

To choose the Type of allocation, use **Type** field. There are six options available to calculate allocations. These are described in the table above.

If you select the **Percentage of Phase Cost** type, the **Amount** field will be automatically enabled. You can then enter the percentage of infrastructure costs that you wish to allocate to this phase.

Next, choose which infrastructure phases you want to allocate from by clicking on the ellipsis in the **Selection** field. This action will show a list of infrastructure phases. To include a phase, check the Include check box against the phase name.

### Distributing Infrastructure Costs Across Development Phases

You can allocate infrastructure costs based on project or phase revenues and, regardless of the method you choose:

* Calculate how infrastructure costs are allocated
* View how infrastructure costs are allocated without having to add up and re-enter data

All Infrastructure Phases

Select the checkbox for each infrastructure phase to include/exclude.

All Development Phases

Select the checkbox for each development phase to include/exclude.

# Professional Fees

Navigation: Home Ribbon>Definition>Professional Fees This section describes the entry of all professional fees.

Professional fees are, by default, calculated as a percentage of construction costs defined in the Capitalised Rent and Sales areas. You can choose to include Contingency and/or Demolition and Road/Site Works in the calculations. To do this, check the relevant options on the Expenditure tab of the Assumptions for Calculation window.

See Also Expenditure Tab

The fee amount will be distributed and the Construction stage defined in the time scale using the prevailing construction curve type.

## Standard Professional Fees

There are six standard **Professional Fee** fields available, plus Other Professionals all of which allow you to enter an unlimited number of items.

The standard fees are: Architect, Quantity Surveyor, Structural Engineer, Mechanical/Electrical Engineer, Project Manager and Construction Design Manager.

Click the ellipsis button to open up the Detail Editor on each fee. See Also

Editing Data

## Other Professionals

This schedule is used for entering any other construction-related fees and fixed costs. Click on the **Other Professionals** detail button to view the schedule.

See Also Editing Data

# Marketing, Letting, & Disposal Costs

## Marketing Costs

Navigation: Home Ribbon>Marketing, Letting & Disposal>Marketing>Ellipsis

The Marketing cost can be placed as a single amount at the beginning of the letting stage defined in the time scale.

Click the ellipsis button to open up the Detail Editor for Marketing Costs.

**Note:** Please see Editing Data for further details of the common controls in this editor.

## Letting Fees

Navigation: Home Ribbon>Definition>Letting Fees>Ellipsis

Enter the Letting Agent Fee and Legal Fees as a Rate on Lettings (% of Rent), fixed amount, rate per square foot/meter or as an amount per unit.

Click the ellipsis button to open up the Detail Editor for Letting Agent Fees or Letting Legal Fees.

**Note:** Please see Editing Data for further details of the common controls in this editor.

The Letting Agent Fee and Legal fees will normally be placed as single amounts at the start of the Sale stage defined in the time scale. If the Fees are entered as percentage values, their timing will follow that of the rental items to which they relate.

The Letting Fees are, by default, always related to all rental items defined in the Area Schedule. When you save the Area Schedule, ARGUS Developer checks the number of rental area definitions and updates the Letting Fees relation. You can select which rental items the fees apply to by clicking on the **Selection** control and checking the appropriate boxes in the Include column.

## Purchaser's Costs

Navigation: Budget>Definition>Marketing, Letting & Disposal>Purchaser's Costs>Ellipsis

Navigation: Home Ribbon>Definition>Marketing, Letting & Disposal>Purchaser's Costs>Ellipsis

**Note:** Confirm that System Configuration>Show>Purchaser's Cost is selected.

## Introduction

Allows you to add different costs associated with land sales.

Purchaser's Costs, when entered as a related percentage, are normally related to Capitalised Rent. You can choose to include non-capitalised sales in the calculation. To do this, select the **Assumptions** command in the Calculation Assumptions group on the Home tab, then select which Direct Sales option is required under the Expenditure tab.

### Parameters

* Purchaser's Costs will normally be placed as a single amount at the start of the sale stage defined in the time scale.
* If the cost is entered as a percentage value, its timing will follow that of the items to which it is related.
* Purchaser's Costs defined as a related percentage are, by default, related to all items defined in the Capitalised Rent form.
* When you save and exit from the Capitalised Rent form, ARGUS Developer checks the number of rental area definitions and updates the purchaser's costs relation.

Heading

Type a heading.

Type

Choose a type:

* Fixed Amount
* Related %
* Stamp Duty
* Rate pf2 Gross
* Rate pf2 Net
* Rate pf2 Alternate
* Rate pf2 Additional
* Rate/Unit
* Rate/Gross Land Area
* Rate/Net Land Area
* Multiply Rate by Units

Total

Displays the total.

Selection

Click the ellipsis button to open the related Related Items Selection popup.

Amount

Displays the amount as a percentage.

Repeat Cycle Choose a frequency:

* None: Does not repeat.
* Monthly: Repeats every month.
* Quarterly: Repeats every quarter.
* Semi-Annual: Repeats twice per year.
* Annual: Repeats once per year.
* Custom: Repeats ever year by the number you type in the Repeat Frequency field.

Repeat Frequency

Auto displays based on your selection for **Repeat Cycle**.

Timing

Click the ellipsis button to open the Data Distribution popup.

Notes

Click the ellipsis button to type any notes. See Also

Creating and Editing Items

## Sales Fees

Navigation: Home Ribbon>Definition>Marketing, Letting & Disposal>Sales Agent Fee>Ellipsis

Enter the Sales Agent and Legal fees as a percentage of total Capitalised Rent, fixed amount, rate per square foot/meter or as an amount per unit.

Click onto the ellipsis button to open up the Detail Editor for Sales Agent Fee or Sales Legal Fee.

**Note:** Please see Editing Data for further details of the common controls in this editor.

The sales fees will normally be placed as a single amount at the start of the sale stage defined in the time scale. If the fees are entered as percentage values, their timing will follow that of the items to which they are related.

The sales Fees are always related to all items defined in the Capitalised Rent and Sales form. When you save the area schedules, ARGUS Developer checks the number of rental and sales area definitions and updates the Sales Fees relation.

# Additional Data

Navigation: Home Ribbon>Definition>Additional Data

This section describes the entry of any additional revenues, costs, and fees that are not included in the standard fields on the Definition screen. They can occur at any time during the project and are not tied to any stage of development.

See Also Arrangement Fee

Development Management Fee

Rent Review Fee Additional Revenue Additional Costs Additional Related Rent Additions / Costs Sales Additions / Costs Developer's Profit

## Arrangement Fee

Navigation: Home Ribbon>Definition>Additional Data

Note: You can change the label to Arrangement Fee. For more information, see Custom Label Descriptions**.**

The arrangement fee is normally entered as a fixed amount. This will be placed as a single amount at the beginning of the purchase stage defined in the time scale.

Arrangement fees can also be entered as related percentage fees, rate per floor area/unit, and so on.

Click onto the ellipsis button to open the Detail Editor for Arrangement Fee:

Please see Editing Data for further details of the common controls in this editor.

## Development Management Fee

Navigation: Home Ribbon>Definition>Additional Data>Development Management Fee>Ellipsis

## Purpose

This fee is typically entered as a percentage related fee. You must decide upon which costs the fee will be calculated.

To do this, click on the ellipsis button to open the Detail Editor for Development Management Fee:

## To enter a percentage of Development Costs

1. Click on the **Selection** ellipsis button
2. Select the development costs the fee is based on
3. The timing and distribution of the fee will follow that of the source development costs

The Development Management Fee can also be defined on other bases including as a fixed amount, rate per floor area/unit and so on.

Please see Editing Data for further details of the common controls in this editor.

## Rent Review Fees

Navigation: Home Ribbon>Definition>Additional Data>Rent Review Fee>Ellipsis

Rent Review fees can be entered as a percentage when the Tenant's Rental Income Stream mode is active. If the property is subject to rent reviews during the Income Flow stage, the program will calculate fees based on the net rent achieved (inclusive of rental growth). As a related cost, its timing will follow that of the items to which it is related.

Rent review fees can also be entered as a fixed amount, rate per square foot or meter, an amount per unit, or other options - and will normally be placed as a single amount at the start of the Income Flow stage defined in the time scale.

To change the way the fee is calculated, its timing, or its distribution, click the ellipsis button in the **Rent Review Fee** field to open the detailed definition screen and select the Timing control.

See Also: Editing Data

## Additional Revenue

Navigation: Home Ribbon>Definition>Revenues

Any miscellaneous income streams can be entered into the Additional Revenue schedule.

Click on the **Additional Revenue** ellipsis button to view the schedule. The schedule is laid out as a mini-cash flow for each revenue item, with each period able to accept a fixed amount. Use the Heading column to enter a descriptive name and press the ENTER key to move to the next column.

See Also Editing Data

## Data View Cycle

The data columns can be shown either in monthly, or other view cycles by changing the

**Data View Cycle** drop-down as shown below.

## To use a revenue to reduce the cost balance

If you have revenues that are used to reduce the cost balance, use the **Cost Type** drop down. These types of revenues will appear in the Cost section of the summary report.

1. Click **Tools >> Show Financial** Data
2. Drop down the **Cost Type** selector
3. Select Revenue (Reducing Cost)

## Additional Costs

Navigation: Home Ribbon>Definition>Additional Data>Additional Costs

Any miscellaneous costs may be entered using the Additional Costs schedule. The use of this schedule is as described in the Additional Revenue section above.

To deduct a cost from the revenue balance

If you have a cost that is used to reduce the revenue balance, use the **Cost Type** drop- down. These types of costs will appear in the Revenue section of the summary report.

1. Click **Tools >> Show Financial** Data
2. Drop down the **Cost Type** selector
3. Select Cost (Reducing Revenue)

## Additional Related

Navigation: Home Ribbon>Definition>Additional Data>Additional Fees

Any miscellaneous related items may be entered using this schedule. It is possible to define second sets of Sales Fees, Grants and Geared Ground Leases on this schedule.

See Also

Creating and Editing Items

To create a new related cost or revenue

1. Click the **Add New Item** command on the tool bar
2. Type the name into the Heading cell
3. Select the relation **Type** from the drop-down selector
4. Select the source items to which this one is related by clicking the **Selection**

ellipsis

1. Enter the relation rate into the **Amount** field
2. Select the type of cost or receipt. This field will be updated automatically after the Category has been chosen, but you may amend it at any time.

## To make the cost or revenue repeat over time

1. Select a Repeat Cycle
2. For Monthly, Quarterly, Semi-Annual and Annual, the Repeat Frequency will be entered automatically
3. For Custom, you enter the Repeat Frequency

## To customise the timing or distribution

1. Select the **Timing** ellipsis button to override any timing or distribution

## To choose the appraisal report location

1. Select the Appraisal Category. The Category determines where the cost/revenue will appear on the Appraisal Summary.

## Rent Additions/Costs

Navigation: Home Ribbon>Definition>Additional Data>Rent Additions/Costs>Ellipsis

Recoverable and non-recoverable rent costs can be entered using the Rent Additions/Cost schedule.

See Also Editing Data

An unlimited number of rent costs may be entered into this schedule. If the cost is capitalised, it will either be deducted from or added to the investment valuation.

|  |  |
| --- | --- |
| **To** | **Do This** |
| Add/Delete new rows. | Use the **Plus** and **Minus** buttons. |
| Change Cost or Revenue. | Click in box and select from drop-down. |
| Change Type. | Click in field and choose from one of several options:   1. Fixed Amount/Unit/Year; 2. Fixed Amount/Area/Year; 3. Amt/m2/yr x Net Area (or, if Imperial, Amt/ft2/yr x Net Area); 4. Amt/m2/yr x Gross Area (or, if Imperial, Amt/ft2/yr x Gross Area); 5. Amt/m2/yr x Alternate Area (or, if Imperial, Amt/ft2/yr x Alternate Area). 6. % of Base Rent; 7. % of Gross Rent (this includes Base Rent, plus all other Rent Addition items related to this area record, except for other % of Gross Rent items). |
| Enter Amount. | Type in the amount for the cost or revenue into the **Amount**  field. |
| Apply to different area/units from the area schedule. | Click into Selection and select the tenant/unit(s) to which the rent addition/cost applies. |

|  |  |
| --- | --- |
| **To** | **Do This** |
| Apply growth to rows. | Click into the **Inflation/Growth** field and select from menu of growth sets (previously defined). |
| Apply private or tenant capitalisation rate. | Click into **Capitalisation** field and choose either the Private Rate or Tenant Rate option. If choosing Private, enter rate to the right of box.  If you do not wish to capitalise the rent addition/cost, select No Capitalisation. |

## Sales Additions/Costs

Navigate: Home Ribbon>Sales Areas>Sales Additions and Costs

Additional sales costs and revenues can be entered using the Sales Additions / Costs schedule.

See Also: Editing Data

An unlimited number of rows of data may be entered into this schedule. The value, will either be deducted from or added to the sales valuation. The use of this schedule is as described in the Rent Additions/Costs section above.

|  |  |
| --- | --- |
| **To** | **Do This** |
| Add/Delete new rows. | Use the **Plus** and **Minus** buttons. |
| Change Cost or Revenue. | Click in box and select from drop-down. |
| Change Type. | Click in field and choose from one of various options:   * Fixed Amount/Unit; * Amt x Net Area; * Amt x Gross Area; * Amt x Alternate Area. |
| Enter Amount. | Type in the amount for the cost or revenue into the  **Amount** field. |

|  |  |
| --- | --- |
| **To** | **Do This** |
| Apply to different area/units from the area schedule. | Click into the **Selection** field and apply to a unit (or units). |
| Apply growth to rows. | Click into the **Inflation/Growth** field and select from menu of growth sets (previously defined). |

## Developer's Profit

Navigation: Home Ribbon>Definition>Costs>Developers Profit

You can include an allowance for Developer's Profit, as a cost to the project.

Select **Developer's Profit** from the Definition menu. This opens the Developer's Profit window:

Enter the developer's profit as a percentage of the net development value, then click the

**OK** button.

An additional row will be added to the cash flow displaying this item.

# Cash Flow

## Project Cash Flow

Navigation: Home Ribbon>Project Cash Flow

The Project Cash Flow is a flexible analysis tool that deals with almost every type of single or multi-phased scheme:

* Records all costs and receipts entered into the Definition section of the program.
* Defines precise cost distribution and relationships between various items of data.
* Automatically updates financial calculations when any value changes. See also, Cash Flow Commands.

## Background

Investors use revenue return on expenditure to evaluate a development project; however, calculating a simple surplus or deficit is only a general guide to deciding if the project is worth pursuing. Developer discounts the entire project in order to:

* Equate the costs and revenues to present value figures.
* Enable comparisons to alternative investments.

### What's on the Cash Flow Screen?

The cash flow is comprised of several main sections:

1. A tool bar that allows you to change the appearance and cycle of the cash flow.
2. The properties of each row, such as the Heading and Interest Set.
3. The cash flow grid containing the project costs and receipts.
4. The Interest/Inflation and Totals grid.
5. The status display on the bottom of the window, which shows information about the currently selected cell.

## Cash Flow Grid

Navigation: Home Ribbon>Project Cash Flow

The cash flow is a grid of rows and columns. Each cell is the intersection of a row and column and holds periodic costs and receipts.

When starting ARGUS Developer for the first time, you should find that all costs are displayed in red and all receipts in blue. You can change the colour of the cell values by clicking on the **Cash Flow Options** button or by choosing **Options** from the Tools menu.

Generally, you first select the cell you want to work with, and then you enter data or choose a command. A selected cell appears highlighted on the screen. The active cell is the cell into which data is entered when you start typing. Only one cell is active at a time.

To change the active cell

Move the mouse pointer to a cell and click into it, or use the cursor keys.

To scroll through the grid

1. Move the mouse pointer to the down arrow in the vertical scroll bar on the right edge of the grid, and then click. The grid moves down one row.
2. Click the scroll bar area below the scroll box, in the vertical scroll bar on the right edge of the grid. The grid scrolls down one screen.
3. Move the mouse pointer into the scroll box. Hold the mouse button down, move the pointer back to the top of the vertical scroll bar, and then release the mouse button. This is called dragging. The grid scrolls back up to the first row.

## Status Bar

Navigation: Home Ribbon>Definition>Bottom>KPI Dashboard

The status display shows information about the currently selected cell. It is located on the bottom of the Cash Flow window:

The following list shows the types of information displayed here (from left to right):

* + How many of the phases are included/not included in the currently-displayed phase grouping
  + The current phase name; the currently selected cell’s location in the Cash Flow grid
  + The type of value the cell contains
  + The status of the currently selected cell (whether it has “Normal” status or otherwise)
  + An ID number which uniquely identifies the currently selected cell. If you need to do so, you can quote this number when making a call to technical support
  + An average, count or sum of a selected range of cells in the cash flow. This status information replaces the ID number when a range of cells is selected

## Status bar options

In addition to the useful information described above, the status bar can also display an average, count or sum total of a range of cells.

### To display an average

1. Select multiple cells in the grid by clicking and dragging to “paint” a range of cells.
2. The ID number (on the far right of the status display) will change to display a number.
3. Right-click on this number and select the Average menu option.
4. The number will change to show the average of the values in the cells you selected:

### To display a cell count

1. Select multiple cells in the grid by clicking and dragging to “paint” a range of cells.
2. The ID number (on the far right of the status display) will change to display a number.
3. Right-click on this number and select the Count menu option.
4. The number will change to show the number of cells you selected:

### To display a sum total

1. Select multiple cells in the grid by clicking and dragging to “paint” a range of cells.
2. The ID number (on the far right of the status display) will change to display a number.
3. Right-click on this number and select the **Sum** menu option.
4. The number will change to show the total of the values in the cells you selected:

### Other settings

When using the Average, Count and Sum features, there are also other menu options available when you right-click on the ID number:

* + **Include Hidden Rows:** If you check this option, any hidden rows that are within the currently-selected range of cells will be included in the average, count or sum calculation.
  + **Include Zero Rows:** If you check this option, any zero rows that are within the currently-selected range of cells will be included in the average, count or sum calculation.
  + **Include Heading Rows:** If you check this option, any heading rows that are within the currently-selected range of cells will be included in the average, count or sum calculation.

## Cash Flow Context Tab

Navigation: Home Ribbon>Cash Flow Ribbon

When you click into the Project Cash Flow or the Finance Cash Flow for the first time, the ribbon bar shows the Cash Flow Tools Context tab, highlighted in green. The Cash Flow Tools context tab contains all the commands you will need when you are working with cash flows.

When you click into another part of the program, the Cash Flow Tools context tab will be hidden. The next time you click into the cash flows, the context tab will be shown, but you will need to click it to show the commands.

See also, Cash Flow Commands.

## Cash Flow Commands

Navigation: Cash Flow Ribbon

You can manipulate the information shown in the cash flow by adding and deleting rows, and changing links to other rows. The cash flow commands are accessed from the Cash Flow Tools context tab. Alternatively, you can right-click with the mouse to access the more frequently used commands.

### Copy and Paste

You can copy and paste individual cells or entire rows of data within the cash flow. In addition, you can copy the distribution curve from one row to another. Please note that, whilst you can copy any row in the cash flow, you cannot paste to rows that are related to other rows.

To copy a cell

1. Select the cell that you want to copy
2. Choose the **Copy Cell** command from the Clipboard group or press CTRL-C on the keyboard.
3. Select the cell or range of cells that you want to paste into.
4. Choose the **Paste** command from the Clipboard group or press CTRL-V on the keyboard. If you select any area-based cells when pasting, the associated area record will be updated.
5. Note: You cannot paste values into calculated line items.

Cut and Paste

Cut and Paste is available for single fixed amounts in the Project Cash Flow. Only values calculated or produced in an Area Schedule can be moved.

1. Select the cell that you want to cut.
2. Note: You cannot cut values from calculated line items.
3. Choose the **Cut** command from the Clipboard group or press CTRL + X on the keyboard.
4. Select the cell s that you want to paste into.
5. Result: Cut cell value deletes once paste is complete.

To copy a row

1. Move to the row that you want to copy.
2. Choose the **Copy Row** command from the Clipboard group.
3. Move to the row that you want to paste into.
4. Choose the **Paste** command from the Clipboard group or press CTRL-V on the keyboard.

To copy a row’s distribution curve

1. Move to the row that you want to copy.
2. Choose the Copy Row Distribution % from the Clipboard group.
3. Move to the row that you want to paste into.
4. Choose the **Paste** command from the Clipboard group or press CTRL-V on the keyboard. The data values on the pasted row will now follow those on the copied row.

Cut and Paste

Cell data valued can be cut from one period and pasted into another when the cells are on the same row.

#### To cut a cell

1. Move to the cell that you want to cut.
2. Choose the **Cut Cell** command from the Clipboard group.
3. Move to the cell that you want to paste into.
4. Choose the **Paste** command from the Clipboard group or press CTRL-V on the keyboard.

Add Row

You can add new rows to the cash flow when the Definition screen does not show a pre- defined field type for either a cost or revenue, or when you want to create a cash flow from scratch.

To add new rows to the cash flow

1. Select the **Add** command from the Editing group.
2. Enter the number of rows you want to add by typing a number or by using the spinner arrows.
3. Choose either the default category or click the **Choose another category radio**

button to choose your cost or receipt type.

1. Click on the **Add** button.

To code newly added rows

1. Select a category from the Category Browser list (see picture below). It is important that you code each new row, as it is the code that determines where the row will be placed in the cash flow and how the row’s value will be treated in the calculations.
2. Make any selections from the Options section (see below for further explanation of the options listed).
3. Click on **Accept Category**. After each new line is added, a progress label is updated on the screen.

### Options

There are several options that determine what happens to a row after it is created:

**Hide cash flow row from calculations:** Select this check box to hide the row from calculations. This box will be selected automatically if you code a line as any of the following: Annual Rent, Ground Rent, Rent History or Existing Income.

**Show % Relation Editor after creating row:** If you want to relate the row to another, select the **Show Relation** option. When you click on **Accept Category**, the Relate form is displayed and you can relate the row to any other rows.

**Add Source rows to cash flow for % related items:** If you create a row that is normally dependent on other items being present (for example, Architect fee which is related to Construction among other things), you should select the **Create Source** option. ARGUS Developer will automatically generate rows that the new fee depends on.

**Add Area Definition for Rent/Sales/Construction items:** If you are creating a Rent, Sales or Construction row, you may want ARGUS Developer to generate an Area definition record. In this case, the new row is linked to an area definition.

If you are creating a Construction row, you will be asked to specify whether the construction data is linked to a Rent or Sales definition.

Edit Source

When you want to edit the detail behind the cash flow data, select the **Source Data** command from the **Edit** drop-down list in the Editing group. This opens the Detail Editor for the selected cash flow row which can then be edited or amended.

Please see Editing Data for further details of the common controls in this editor. Delete Row

You can delete a row from the cash flow to permanently remove it from the project. When you delete a row, it disappears from the Definition screen and the following rows shift up to fill the space.

#### To delete a row from the cash flow

1. If you want to remove several rows in one go, tag the rows (see the section on Tag below).
2. Select the **Delete** command from the Editing group or press CTRL-DELETE to delete the row.
3. Confirm the deletion. Rows are deleted from the cursor position downwards and the cash flow is recalculated.

If you delete a row that was created from an area definition, the area definition will be deleted. This means that if you delete a Capitalised Rent row, its MRV and construction rows will be deleted too.

If you delete a row that has related fees attached to it, then the related fee is converted automatically into a fixed amount. You will not lose the information in the related fee cells.

Heading

The standard heading of any row can be changed from within the cash flow to update area records and reports.

To change the heading

1. Click with the mouse into the Heading cell.
2. Type a new heading over the existing entry and press the **OK** button.

Lock/Unlock

Rows may be locked in the cash flow to prevent manual values being entered into the data cells. The Locked status will be toggled on or off by this command. Related rows are locked automatically when they are created.

To lock or unlock a row

1. Move to the row that you want to lock.
2. Select the **Lock** command from the **Edit** drop-down list in the Editing group or press the L key on the keyboard.

### Hidden Rows

Rows may be marked as hidden so they are not included in the row/column totals, neither will they attract any interest.

Hidden rows can still be used as the basis for relationships, and it is possible to hide one or more rows in the worksheet and relate a normal fee line to it. In this case, only the figures in the related rows are used by the calculations.

When printing cash flow reports, you can choose whether or not to print hidden lines.

To hide a row

1. Move to the row that you want to hide.
2. Select **Hide** command from the **Edit** drop-down list in the Editing group or press the O key on the keyboard.

### Fill

1. If the row is currently hidden, the Hidden Status window will have the **Unhide** option selected. If the row is currently un-hidden, the Hidden Status window will have the **Hide** option selected.

You can quickly copy a single cell value backwards and forwards through any non- related row using a variety of standard distribution cycles: monthly, quarterly and so on. If you repeat a cell on an area-based row, the associated area record will be updated.

To fill a range of cells to the right

* 1. Move to the cell whose value you want to use to fill other cells.
  2. Select the **Fill Right** command from in the Editing group or right-click to use the popup menu.
  3. Choose the repeat cycle in the Every box, or leave it at 1 for every period in the range.
  4. Choose the number of cells in the range from the For box, or select to Phase End.

To fill a range of cells to the left

1. Move to the cell whose value you want to use to fill other cells.
2. Select the **Fill Left** command from in the Editing group or right-click to use the popup menu.
3. Choose the repeat cycle in the Every box, or leave it at 1 for every period in the range.
4. Choose the number of cells in the range from the For box, or select to Phase Start.

To fill all cells to the left and right

1. Move to the cell whose value you want to use to fill other cells.
2. Select the **Fill All** command from in the Editing group or right-click to use the popup menu.

### Sign

Every row in the Cash Flow carries a sign that indicates whether it is a cost or revenue. Two additional signs specify whether a cost row will be used to offset/reduce revenues or whether a revenue row will be used to offset costs.

To change the sign for a row

1. Move to the row for which you wish to change the sign.
2. Select the **Sign** command from **Edit** drop-down list in the Editing group.
3. Choose a sign by clicking one of the **Sign** radio buttons.

### Interest and Inflation

Interest, inflation and growth sets can be selected and applied to a single or selection of rows in the Cash Flow. Interest sets make the application of interest rates to individual rows, or groups of rows. When an interest rate is changed within a set, any row to which the set is attached automatically has its interest rates updated.

**Note** the Interest command is applicable only when Basic Finance (Interest Sets) is the selected finance mode.

To apply interest/inflation/growth sets

1. Select the **Interest** or **Inflation** commands from the Edit drop-down in the Editing group.
2. Select the interest, inflation and/or growth set(s) to be applied in the drop-down lists. As you change set numbers the pre-defined rates are shown to the right of the field.
3. Choose the rows that the selected sets are to be applied to. Sets can be applied to the current row, to tagged rows, or to all lines in the cash flow, phase or category by selecting the required option.
4. Click **Apply** to apply your settings.

### Clear Data Cells

Data cells may be cleared from the cash flow using the **Clear** command. When a cell is cleared, its value is set to zero.

To clear either a cell or row

1. Move to the cell or row.
2. Select the **Clear Cell** or **Clear Row** command from the Editing group.

To clear all rows in the cash flow

1. Select the **Clear All Rows** command from the Editing group.

To zero tagged rows

1. Tag the range of rows (see the section on Tag below).
2. Select the **Clear Tagged Rows** command from the Editing group.

**Note:** Any rows that are attached to an area definition will be updated automatically.

### Tagging Rows

You can tag a block of lines prior to using the **Hide** or **Clear** commands so that the command works on the whole block in one go. The tagged blocks are shown here outlined in green for illustrative purposes:

To tag a contiguous range

1. Before tagging rows, the row properties columns must be visible. To display the Row Properties, right-click in the cash flow grid, select Show > Row Properties.
2. Click into the Tagged cell in the Row Properties section. The Tagged indicator will change to display a tick, and the tagged line will now be shown with a different coloured background (the colour that is displayed here depends on your colour settings).
3. Press and hold down the SHIFT key.
4. Keep the Shift key pressed and click the Tagged cell at the end of the range.

To tag a non-contiguous range

1. Before tagging rows, the row properties columns must be visible. To display the Row Properties, right-click in the cash flow grid, select Show > Row Properties.
2. Click into the Tagged cell in the Row Properties section. The Tagged indicator will change to display a tick, and the tagged line will now be shown with a different coloured background (the colour that is displayed here depends on your colour settings).
3. Press and hold down the CTRL key as you tag other rows.

To remove the tags from all tagged lines

1. Click anywhere in the Cash Flow grid.

Export Cash Flow to Excel

The cash flow may be exported to MS Excel using the **Export Full Cash Flow**

command from the popup menu. The full cash flow and additional financial data will be

exported to a pre-defined template in Excel. When the export is complete, Excel will be opened on your desktop so that you may review the file.

See Also

Exporting the Cash Flow to Excel

### Row Properties

The row properties show you additional information about each row in the cash flow, in several columns immediately after the Row Heading column. You can hide these to show more data in the cash flow grid.

To display the Row Properties, right-click in the cash flow grid, select Show > Row Properties.

The Row Properties are displayed as a group of columns between the Heading and the data columns.

**Heading:** Each row has a heading in the first column. The heading is normally filled in automatically from the Definition screen, but you can specify new headings in the cash flow. The heading is printed in the cash flow reports.

**Category:** Each row has a cost/revenue category automatically assigned when it is created. The category tells ARGUS Developer how to treat the item. You are not allowed to change the category.

**Tagged:** Rows can be tagged so that an operation can be performed on the entire block. When a row is tagged, a “Y” shows in the cell and the row is coloured with a darker background.

**Hidden:** A row may be hidden, so that its data cells are not included in row/column totals, neither do they attract any interest. When a row is hidden, a “Y” shows in the cell.

**Locked:** A locked row is one on which the data cells cannot be changed by typing a value into the grid. When a row is locked, a “Y” shows in the cell.

**Phase:** Shows the phase number to which the row belongs. You are not allowed to change the phase number.

**Rows:** can be related to other rows by defining a relationship at a fixed percentage. Where a row is related, a “Y” shows in the cell.

**Sign:** Shows the sign for the values on the row: ++ indicates a revenue, -- a cost, -+ a cost offsetting income and +- income offsetting cost.

**Interest:** When Basic Finance (Interest Sets) is applied to a project, each row has an interest set attached to it. This governs the rate at which interest is calculated on each of the data cells. The interest set number is shown in this cell. When Structured Finance is applied to a project, this column is not displayed.

**Inflation:** Each row may have an inflation or growth set attached to it. This governs the rate at which inflation or growth is calculated on each of the data cells. If inflation has been applied, then a “Y” is shown in the cell. If no inflation set is applied to a row, then “N” will be displayed.

**Sales Tax:** Each row may attract Sales Tax at any specified rate together with a rate at which the tax may be recovered. If a row attracts sales tax, a “Y” is shown in the cell.

**Notes:** Each row can have notes attached. If a row has notes defined, a “Y” is shown in the cell. You can add notes by clicking on the Notes cell in the grid; this will open an editor window.

### Cell Properties

Additional information is available for each cell in the cash flow. You can inspect a cell’s value – both uninflated and inflated, plus its ratio of the whole row total using the Cell Properties window.

**Period Number:** This is the month for the selected cell.

**Period Date:** This is the date for the selected cell.

**Value:** This is the value of the cell.

**Inflated Value:** This is the value plus any inflation.

**% of Total Line Value:** This is the percentage of the cell in terms of the total for the entire row. (Cell Total / Row Total)

**Fixed Status:** This indicates whether or not the cell is fixed.

**Unit Sales Period Growth Data:** This shows the growth information for unit sales distributions.

## Finance Cash Flow: Basic Finance (Interest Sets)

Navigation: Home Ribbon>Finance Type>Basic Finance

The Cash Flow can be expanded to show a second grid containing column totals, interest and inflation rates, and VAT payments and receipts when **Basic (Interest Sets)** has been selected as the financing method in the Finance tab of Assumptions for Calculation.

You can use the Finance view to override the periodic rates for any of the interest and inflation sets or to enter the fixed interest total for a period.

To show the Finance Cash Flow, select the **Interest Totals** command in the View group. The Finance grid is shown here outlined in red for illustrative purposes:

In the Finance view, you can show less information by selecting **Show > Brief Interest Details** from the popup cash flow menu. This view hides the inflation and interest rate rows and shows only sales tax (if applied), the period totals and total interest amounts.

### Current Interest Set

Shows the Debit and Credit rates for any of the defined interest sets. You can modify the profile of rates to easily recalculate interest for any items attached to the set.

To view interest rates

1. Right-click within the Finance grid.
2. Select an Interest Set from the drop-down.

To change a fixed interest rate

1. Right-click within the Finance grid.
2. Select the **Modify Interest Sets** command.
3. Make any changes in the Stepped Interest tab.

To enter a fixed interest cost

1. Right-click within the Finance grid.
2. Select an Interest Set from the drop-down list.
3. Move to the Total for Set Name row.
4. Type the fixed interest cost into the required period cell and press return. The Finance grid will display the amount in the Debit Rate cell and blank out the rate in the Credit Rate cell.

### Inflation Set

The inflation rates for any particular inflation set can be viewed in the finance grid. The rates can be modified from here so that inflation can be quickly recalculated for any rows to which the set is attached.

To view inflation or growth rates

1. Right-click within the Finance grid.
2. Select an Inflation/Growth Set from the drop-down list.

To modify inflation or growth rates

1. Right-click within the Finance grid.
2. Select the **Inflation Sets** command.
3. Make any changes in the Stepped Inflation or Growth tabs.

### Cash Flow View Cycles

The Cash Flow is normally set up to show a monthly periodic view of data where each column represents a single month. Other view cycles are available, such as Quarterly, where each column represents three months of data. The standard view cycles that are available are: monthly, quarterly, semi-annual and annual.

Cash flow view cycles are available to use whenever you look at cash flow data, or print cash flow reports. In addition to the standard view cycles, other types of view cycle can be created to suit specific project or accounting requirements. To create other view cycles, select Edit View Cycles from the **Cycle** drop-down in the View group.

To create a regular periodic cycle

1. Select Edit View Cycles from the **Cycle** drop-down in the View group.
2. Select the **Add > New Basic Cycle** command and enter a name for the new cycle.
3. Enter the number of months that each column represents into the Months in Cycle box.
4. Click the **OK** button.

To create a cycle aligned to a month name

1. Select Edit View Cycles from the **Cycle** drop-down in the View group.
2. Select the **Add > New Calendar Cycle** command and enter a name for the new cycle.
3. Select the number of months that each column represents from the **Show me**

drop-down box.

1. Select the month name on which the cycle starts.
2. Click the **OK** button.

To create a custom cycle

1. Select Edit View Cycles from the **Cycle** drop-down in the View group.
2. Select the **Add > New Split Cycle** command and enter a name for the new cycle.
3. Enter the length of time over which you want a regular cycle into the **Months**

box.

1. Select the regular cycle from the **Cycle** drop-down box.
2. Click the **OK** button.

To create a cycle based on the mortgage date

1. Select Edit View Cycles from the **Cycle** drop-down in the View group.
2. Select the **Add > New Mortgage Takeout Cycle** command and enter a name for the new cycle.
3. Enter the regular cycle for the months before the mortgage takeout period.
4. Select the date for the mortgage takeout period based on either the Earliest Mortgage date or the Latest Mortgage date from any active finance structures.
5. Enter the regular cycle for the months after the mortgage takeout period.
6. Click the **OK** button.

### Cash flow search

To search for a specific item in the Project cash flow, use the **Find** command in the Rows group:

In the **Find what** field, type in what you are looking for - this could be a specific number, or row heading. Previous search strings will be stored so you can use them again at a later time - just select them in the drop-down list.

Use the Look In controls to specify where you wish to search within the cash flow.

In the Search Options section, you can use the controls to fine-tune your search.

Use the controls in the When data is found section to specify what action will be taken when the object of the search has been found.

Click on **Find**, or Find Next if you wish to skip to the next occurrence.

### Grouping Rows

In the cash flow, you can set up groupings of rows to make the cash flow presentation easier for you to read. You have a choice of 2 types of grouping complexity:

1. Basic grouping
2. Advanced grouping

### Basic Grouping

Select the **Group Rows** command from the **Group** drop-down in the Rows group. This opens the Group Rows window

Here, you can define up to 4 levels of grouping by selecting types of rows and row attributes, and defining a sort direction.

For example, in level 1 you could select Category, and in level 2 you could select Cost Code. This would perform the primary grouping on the category, and a secondary grouping on the cost code.

Other grouping criteria you can select here are attributes that have been set, such as Locked, Hidden or Tagged.

You can turn off a grouping level by selecting None. This will turn off the grouping level and any other level below it.

The default option is Default Category Order, which groups the rows in a default order factory settings.

When you have defined a grouping pattern in this window and clicked on the **OK** button, the rows in the cash flow will arrange themselves according to this pattern.

### Custom Grouping

Select the **Group Rows** command from the **Group** drop-down in the Rows group. This opens the Custom Grouping window:

In the Cash Flow Custom Grouping window, you can move the existing groupings and row items about by using the arrow buttons.

If you wish to create new groups, you can use the Edit, Add Main Group and Edit, or Add Sub Group options. You can give these groups any name you want, and you can drag existing row items from other groups into a group you have created.

When you click the OK button, the cash flow row and grouping structure will change to reflect the modifications you have made.

### Sorting the Cash Flow

Change the order in which rows are shown by selecting the **Sort** command from the

**Group** drop-down in the Rows group.

This opens the Cash flow Sort Rows window:

Here, you can define up to 4 levels of sorting by selecting types of rows and row attributes and defining a sort direction.

For example, in level 1 you could select Category, and in level 2 you could select Cost Code. This would perform the primary sort on the category, and a secondary sort on the cost code.

Other sort criteria you can select here are attributes that have been set, such as Locked, Hidden or Tagged.

You can turn off a sort level by selecting None. This will turn off the sort level and any other level below it.

The default option is Natural Order, which sorts the rows in a default order factory settings.

When you have defined a sorting pattern in this window and clicked on the **OK** button, the rows in the cash flow will arrange themselves according to this pattern.

### Column and Row Options in Project Cash Flow

The Project cash flow can show extra columns of information such as row totals or row properties. Use the popup menu in the cash flow by right-clicking then selecting the Show option.

**Row Total:** This column is a total of all the values on each row.

**Row Present Value:** This column shows the present value of the values on each row.

**Rows with Zero Value:** This shows any row with a total value of zero.

**Row Properties:** This shows the Row Properties columns.

**Period Time line:** This shows a snapshot of the time scale and phasing stages at the head of the cash flow.

### Summary Options in Project Cash Flow

The following options are available to show or hide additional detail in cash flow groups. These options are found on the **Group** drop-down in the Rows group.

**Group Summaries:** These are extra rows that contain totals for each group of rows that you have defined. Merge Section Summaries by Department Category: This merges together several levels of section summaries to produce one summary. This applies only to operated asset cash flows.

## Structured Finance Cash Flow

Navigation: Home Ribbon>Finance Cash Flow

The Structured Finance cash flow has its own tab from Version 6 onwards. It is available only when Structured Finance is the finance mode for the project. The Finance Cash Flow displays individual cash flows for each finance partner as well as project and combined Partner cash flows.

See Also Structured Finance

In the Finance Cash Flow, each individual partner cash flow can be expanded or hidden by clicking onto the “+/-” expansion button in the title bar that shows each partner’s name. All partner cash flows can be expanded or hidden simultaneously using the **Expand** and **Collapse** commands in the View group.

### Overriding Forecast

Certain line items can be assigned to a cost code. Viewing the Finance Cash Flow in Actual/Forecast view, displays the actuals imported.

Note: When you have timed contributions modeled, the actuals override the timed contributions. The timed contributions display in the report, but are not included to your bottom line.

### Project Cash Flow Pre-Finance

As one of the component cash flows of Structured Finance, the Project Cash Flow is an auto-created cash flow used as a snapshot of the individual costs and revenues. When a project has sales tax calculations active, the pre-finance cash flow shows several extra lines for VAT Paid, VAT Recovered, Net VAT.

* **VAT Paid:** This is the amount of sales tax paid.
* **VAT Recovered:** This is the amount of sales tax recovered.
* **Net VAT:** This line shows the net amount of sales tax paid and reclaimed in each period The Net VAT will be used to (a) add to costs; (b) offset costs; and (c) add to revenues.

## Cash Flow View Cycles

Navigation: Home Ribbon>Project Cash Flow, Finance Cash Flow>Cash Flow Ribbon

The Cash Flow is normally set up to show a monthly periodic view of data where each column represents a single month. Other view cycles are available, such as Quarterly, where each column represents three months of data. The standard view cycles that are available are: monthly, quarterly, semi-annual, and annual. Cash flow view cycles are available to use whenever you look at cash flow data, or print cash flow reports. In addition to the standard view cycles, other types of view cycle can be created to suit specific project or accounting requirements. To create other view cycles, select Edit View Cycles in the drop-down list in the **Cycle** field in the View group.

To create a regular periodic cycle

1. Select Edit View Cycles option in the drop-down list in the **Cycle** field in the View group.
2. Select the **Add > New Basic Cycle** command and enter a name for the new cycle.
3. Enter the number of months that each column represents into the Months in Cycle box.
4. Click the **OK** button.

To create a cycle aligned to a month name

1. Select Edit View Cycles option in the drop-down list in the **Cycle** field in the View group.
2. Select the **Add > New Calendar Cycle** command and enter a name for the new cycle.
3. Select the number of months that each column represents in the drop-down box in the Show me field.
4. Select the month name on which the cycle starts.
5. Click the **OK** button.

To create a custom cycle

1. Select the Edit View Cycles option in the drop-down list in the **Cycle** field in the View group.
2. Select the **Add > New Split Cycle** command and enter a name for the new cycle.
3. Enter the length of time over which you want a regular cycle into the Months box.
4. Select the regular cycle in the drop-down box of the **Cycle** field.
5. Click the **OK** button.

To create a cycle based on the mortgage date

1. Select the Edit View Cycles in the drop-down list of the **Cycle** field in the View group.
2. Select the **Add > New Mortgage Takeout Cycle** command and enter a name for the new cycle.
3. Enter the regular cycle for the months before the mortgage takeout period.
4. Select the date for the mortgage takeout period based on either the Earliest Mortgage date or the Latest Mortgage date from any active finance structures.
5. Enter the regular cycle for the months after the mortgage takeout period.
6. Click the **OK** button.

## Cash Flow Search

Navigation: Cash Flow Ribbon>Rows>Find

To search for a specific item in the Project cash flow, use the **Find** command in the Rows group:

Find window

Find what

In the **Find what** field, enter the term you are seeking such as number or row heading. Select previously stored search strings in the drop-down list.

Options

Click this button to toggle on and off the Look In, Search Options and When data is found sections.

Look in

Use the Look In controls to specify where to search within the cash flow. You may choose from the following options:

* Headings
* Line Totals
* Cost Code
* Line IDs
* Period Data Cells

Search Options

Use the Search Options controls to filter your search. You may choose from the following options:

* Match Case
* Uninflated amount
* Partial match

When data is found

Use the When data is found controls to specify actions to take when the search term is found. You may choose from the following options:

* Tag matching lines
* Go to first occurrence

Click on **Find** or **Find Next** to move to the next occurrence. Click **Close** to exit the Find window.

## Grouping Rows

Navigation: Project Cash Flow Ribbon>Rows>Group>Custom Grouping

In the cash flow, you can set up groupings of rows to make the cash flow presentation easier for you to read. You have a choice of two types of grouping complexity:

1. Basic grouping
2. Advanced grouping

### Grouping

Select the **Group Rows** command in the drop-down list from the **Group** field in the Rows group. This opens the Group Rows window

Group Rows window

Here, you can define up to four levels of grouping by selecting types of rows and row attributes and defining a sort direction.

Group rows by

Select a method for a primary grouping of rows. You can order your results by selecting either the **Ascending** or **Descending** option. You may choose from the following options:

* None
* Block and Phase
* Category
* Cost Code
* Default Category Order
* Heading
* Hidden
* Inflation
* Interest
* Locked
* Notes
* Phase Number
* Related
* Sign
* Tagged
* VAT

Then by (three)

Select a method for a secondary and subsequent groupings of rows. You can order your results by selecting either the **Ascending** or **Descending** option. You may choose from the following options:

* None
* Block and Phase
* Category
* Cost Code
* Default Category Order
* Heading
* Hidden
* Inflation
* Interest
* Locked
* Notes
* Phase Number
* Related
* Sign
* Tagged
* VAT

When you have defined a grouping pattern in this window and clicked on the **OK** button, the rows in the cash flow will arrange themselves according to this pattern.

Example

1. In the **Group rows by** drop-down list, select Category.
2. In the **Then by** (level two) drop-down list, select Cost Code.
3. Primary grouping is by category, secondary grouping by cost code.

### Custom Grouping

Select the **Group** button in the Rows group and **Custom Grouping** option in the drop- down list.

Custom Grouping window

The buttons at the top of the window are as follows:

* + Add Main Group
  + Add Sub Group
  + Delete Group
  + Up/Down/Left/Right Arrows
  + Expand All Groups
  + Collapse All Groups

**Note:** These same functions are accessible through the Edit and Groups commands above the buttons. In addition, you can use the Reset option under the **Edit** command to remove all changes you have made to grouping.

The cash flow row and grouping structure will change to reflect the modifications you have made. Click **OK**.

### Sorting the Cash Flow

Change the order in which rows are shown by selecting the **Sort** command in the drop- down list from the **Group** field in the Rows group. This opens the Cash flow Sort Rows window:

Cash Flow Sort Rows window

Sort rows by

Here, you can define up to four levels of sorting by selecting types of rows and row attributes, and defining a sort direction. Select a method for a primary grouping of rows. You can order your results by selecting either the **Ascending** or **Descending** option.

You may choose from the following options:

* + None
  + Block and Phase
  + Category
  + Cost Code
  + Default Category Order
  + Heading
  + Hidden
  + Inflation
  + Category
  + Interest
  + Locked
  + Natural Order (Default)
  + Notes
  + Phase Number
  + Related
  + Sign
  + Tagged
  + VAT

Then by (three)

Select a method for a secondary and subsequent groupings of rows. You can order your results by selecting either the **Ascending** or **Descending** option. You may choose from the following options:

* + None
  + Block and Phase
  + Category
  + Cost Code
  + Default Category Order
  + Heading
  + Hidden
  + Inflation
  + Category
  + Interest
  + Locked
  + Natural Order (Default)
  + Notes
  + Phase Number
  + Related
  + Sign
  + Tagged
  + VAT

Example

1. In the **Sort rows by** drop-down list, select Category.
2. In the **Then by** (level two) drop-down list, select Cost Code.
3. Primary grouping is by category, secondary grouping by cost code.

The rows in the cash flow will arrange themselves according to the pattern you selected. Click **OK**.

Column and Row Options in Project Cash Flow

The Project cash flow can show extra columns of information such as row totals or row properties. Use the popup menu in the cash flow by right-clicking then selecting the **Show** option.

* + **Total Column:** This column is a total of all the values on each row.
  + **Present Value Column:** This column shows the present value of the values on each row.
  + **Rows with Zero Value:** This shows any row with a total value of zero.
  + **Period Time Line:** This shows a snapshot of the time scale and phasing stages at the head of the cash flow.
  + **Row Properties:** This shows the Row Properties columns.

### Summary Options in Project Cash Flow

The following options are available to show or hide additional detail in cash flow groups. These options are found in the dropdown field in the **Group** field in the Rows group.

**Group Summaries:** These are extra rows that contain totals for each group of rows that you have defined.

**Merge Section Summaries by Department Category:** This merges together several levels of section summaries to produce one summary. This applies only to operated asset cash flows.

# Budget

## Budgeting

Navigation: Budget Ribbon>Budget Cash Flow

The Snapshot module allows up-to-date monitoring and tracking of your development project by setting a budget and seeing the impact of actual transactions will have on your project cash flow. The Snapshot module creates a budget from an existing project cash flow and by linking ARGUS Developer with your chart of accounts, you can then import actual transactions from your accounting systems. Any variations to your budget can be managed by re-forecasting your model.

### Overview

You can use the Snapshot module to model budget data.

Creation of the Budget Cash Flow

* + [Assign cost codes to the project cash flow](#_bookmark265)
  + [Assign job reference](#_bookmark264)
  + [Set Forecast to Become the Budget](#_bookmark268)

Navigate the Budget Cash Flow

* + [Budget ribbon](#_bookmark267)
  + [Structure of the Budget Cash Flow](#_bookmark274)
  + [Viewing modes](#_bookmark273)

Import Actual Transactions and Re-forecasting:

* + Acceptable file formats
  + Contents to be imported
  + [Re-forecast cash flow model](#_bookmark271)

Allocate Invoices

* + [Allocate Invoices](#_bookmark270)

Budget Specific Reports

* + Comparison of KPI’s

## Setting up the Budget Cash Flow tab

To create the Budget Cash Flow tab, you must first perform the following actions:

1. Add a job number
2. Assign cost codes

### Job Number

To enable the Budget Cash Flow to work with actual transactions, you must give your project a job number (should be part of the chart of accounts).

The Job Number is a unique reference number or code (usually from your project accounting system) that is used as a unique identifier for the Project record that allows

you to link your chart of accounts to ensure that transactions are imported to the correct project in ARGUS Developer.

1. Go to the Project tab.
2. Enter the Job Number. You will be given a warning if the Job Number is already in use.
3. Click **Save** on the Quick Access Toolbar or from the Backstage area.

### Cost Codes in the Project Cash Flow

Before you start to work with the Budget Cash Flow, your chart of accounts (cost codes) need to be mapped to ARGUS Developer which should have been done during the implementation stage. Once the cost code mapping has been defined, it needs to be assigned to the portfolio(s) you have added. This ensures that any project(s) attached to the portfolio will use this cost code mapping.

Note: Costs codes do not have to be assigned to individual line items immediately. They can be assigned at a later date when they are actually required. The functions that require a cost code to be assigned are:

* + Creating a [Released Budget](#_bookmark269)
  + [Allocating invoices](#_bookmark270) into the Budget Cash Flow

It is recommended to create and use templates with the cost codes assigned to the most common line items in your model to avoid having to assign cost codes every time a new model is created.

It is highly recommended that the cost codes used in both the external accounting system and ARGUS Developer are the same.

Assign Cost Code

1. Click on **Cost Codes** in the Cash Flow ribbon. This displays the Cost Code column and a drop-down list of the costs codes (defined during implementation of ARGUS Developer).
2. Select the appropriate cost code then click to assign. Alternatively, if you type in the cost code, the list will jump to the nearest relevant cost code. As more of the cost code is typed, the list narrows to match.
3. Perform this procedure for all items in the Project Cash Flow and the Structured Finance Cash Flow (if you have access to that module).

Assign Cost Code in Definition Editor

You can assign cost codes in the definition editors.

1. Click on the Definition tab.
2. Open any cost or revenue editor to select a cost code from the drop-down list.
3. Select an appropriate cost code for the defined cost and revenue line items.

**Note:** Once an actual transaction is assigned a cost code, it is not possible to change the cost code.

## Budget Cash Flow

The Budget Cash Flow is a powerful analysis tool that compares the budget of all costs, revenues and financial records against the latest forecast (including actual transactions) to allow the user to track the progress of their project and provide the ability to amend the model as necessary.

What’s on the Budget Cash Flow tab?

The Budget Cash Flow is comprised of several main sections:

1. The ribbon that allows you to create budgets, redistribute variances and to change the view of the Budget Cash Flow.
2. The budget properties of each row, such as Original Budget, Actuals/Forecast, % Variance to Original Budget.
3. The Budget Cash Flow grid containing the budgeted revenue, costs and finance costs.
4. The Budget Cash Flow time line is sub-divided into three sections that defines the Actuals (historic records), Current Months (total to date) and Forecast (future events).

## Budget ribbon tab

Go to Ribbon>Budget.

If you have the Snapshot module, the Budget ribbon tab is available. This ribbon gives you access to the functions that allows you to create and manage your budgets, re- forecast the cash flow and view the cash flow from different perspectives.

### Create Budgets

Original

Once the stakeholders have agreed a budget to deliver the project, you need to create your Original Budget as the benchmark (or fixed point) against which you will monitor performance in terms of any variances and the impact on KPI’s.

1. Click on **Original** in the Create Budgets section of the ribbon. Result: The Create Original Budget popup appears.

Note: If you have not assigned a [Job Number](#_bookmark264) to your project, a warning window is displayed, and you cannot create your budget. Close the window then go to the Project workspace tab and enter a [Job Number](#_bookmark264).

1. Select **I confirm that project has been approved** and click **OK**.

Result: Your Project Cash Flow, including all the related KPIs, is copied and displayed in the Budget Cash Flow.

Select Finance Structure Phase Group

If you are using the Structured Finance module, a window opens to allow you to select a finance structure phase group to track through the Budget Cash Flow.

**Note:** This window is not displayed if you are applying Basic Finance to your model.

**Note:** This window is not applicable when setting a Revised Budget.

You may choose from the following options:

* All Active Structures
* All Phases Structure

Click **OK** to proceed or **Cancel** to abort the Create Budget process.

Create Budget Without Assigning Cost Codes

You can create a budget without first assigning cost codes. It is recommended to create and use templates with the cost codes assigned to the most common line items in your model to avoid having to assign cost codes every time a new model is created.

Parameters You can:

* Specify which line item classes will have cost codes assigned.
* Assign a cost code at a later date.
* Choose which line items to track and monitor. Follow this procedure:

1. Open a project.
2. Go to **Project Cash Flow**.

Option: You can define Cost Codes in **Control Panel>Cost Codes**.

1. Go to **Ribbon>Budget>Original**. Option: Select **All Active Structures**.

Option: Select **All Phases Structure**. Result: Original Budget Pop-Up appears.

1. Click **OK**.

Result: Cost Code Assignment Pop-Up appears.

#### Choose Continue without assigning cost codes.

Option: Select **Assign Cost Codes now** to assign cost codes to pre-selected line item types in Control Panel>Preferences.

1. Select I confirm that this project has been approved.
2. Click **OK**.

Result: System sets up budget without any cost codes assigned.

Apply a Cost Code to a Budget

You can specify which line item classes must have cost codes assigned.

Before You Begin

You can select which cost code item types are validated by the **Assign Cost Codes now** function.

See Also Cost Codes

Follow this procedure:

1. Open a project.
2. Go to Project Cash Flow.
3. Define Cost Codes in Control Panel>Cost Codes.
4. Go to **Ribbon>Budget>Original**. Option: Select **All Active Structures**. Option: Select **All Phases Structure**. Result: Original Budget Pop-Up appears.
5. Click **OK**.

Result: Cost Code Assignment Pop-Up appears.

1. Choose **Assign Cost Codes now** to assign cost codes to the first instance where a line item does not have a cost code assigned and the Original budget window is closed.

Once cost codes have been assigned follow from step 1.

1. Click **OK**.

Result: System sets up budget with any cost codes assigned.

Revised

As your project progresses, you will pay or receive money, which produces variances to what has been budgeted. Over time, your budget will require adjustments and you will require the stakeholders to approve these changes. If these changes are approved, you will be working with a Revised Budget, which resets the point the project performance will be measured against.

1. Click on **Revised** to set the revised Budget. The Validate Cost Codes window appears. If validated, the confirmation window appears.
2. Confirm the changes. The current Project Cash Flow model, including actuals and updated KPI’s, is copied and fixed in the Budget Cash Flow.

Delete Revised

You can only delete a Revised Budget. The Original Budget is permanent and cannot be deleted.

Click **Delete Revised** to delete the last Revised Budget created. The Budget Cash Flow displays all the data related to the previous Revised Budget.

Warning: If you made any changes to the Definition editors or Project Cash Flow prior to creating a Revised Budget, upon applying Delete Revised Budget, all this information is also deleted and the system resets the budget to the last Revised Budget.

Released Budgets

You can define a portion of your model (line items over a period of time) to create a released budget for day to day budget management. The Released Budget is a subset of the Budget Cash Flow that only displays the items/periods selected. You can use it to compare actual expenditure against budgeted amounts.

Parameters You can:

* Create a Released Budget only after an Original Budget is set.
* Create one or more Released budgets.
* Select which line items/phases will be included in the Release Budget.
* Define the time period the Released Budget will cover.
* Calculate the Released Budget.
* Calculate the remainder of budgeted amounts left to be approved. Set up a Release Budget

Use this procedure:

1. Go to **Ribbon>Create Budgets>Released Budgets>New Released Budget**. Option: Select **Rename Released Budget** to give a pre-existing Released Budget a new name.

Option: Select **Delete Released Budget** to delete a pre-existing Released Budget.

Option: Select **Delete All Released Budgets** to automatically delete all pre- existing Released Budgets in your model.

Option: Select **Save Changes & Close** to save recent changes and close the Pop-Up.

Option: Select **Cancel Changes & Close** to discard recent changes and close the Pop-Up.

1. Select **New Released Budget**.

Result: Released Budget Name Pop-Up appears.

1. Type a **name** and click **OK**.
2. Select Cost Code rows (left side) and click **Add Selected**.

Result: Cost code item is added to Released Budget Group (right side). Option: Click + Shift selects all cost code items in a phase.

1. Click the **Include Until** ellipsis button. Result: popup appears.
2. Select a **date** and click **OK**.

Result: System adjusts the **Released** cell for the cost code item by the selected date.

Result: System subtracts the **Released Amount** from the **Total Amount** to

display the **Unreleased Amount**.

Option: Review the under/over on the Released Budget Summary report.

Filter Budget Groups and Lines You can filter using:

* + All Cost
  + None
  + Line Item Name Released Budgets View

1. Go to Ribbon>Released Budgets View.
2. Select all budgets you want to view.
3. Review the Released Budget columns/line items. Line Items

You can click the ellipsis next to a line item to type any notes you want to associate with this line item. The Note you type is accessible in the Budget Cash Flow and the Released Budget screens.

|  |  |
| --- | --- |
| **Line Items** | **Description** |
| Released Budget | Shows the Released Budget total, which is always a sub-set of the Original/Revised budget. You can define a proportion of the Original/Revised budget as a Released Budget to be monitored and tracked.  For example, you set the Original Budget for 10 items for 1 year at $1,000,000. You define a Released Budget for 3 items in the first 3 months, which is only $200,000. |
| Actuals | Shows invoices imported into ARGUS Developer. |
| Corrections | Shows credit invoices imported into ARGUS Developer. |
| Actual Forecast | Combines the invoices paid to date and all future forecasted amounts. |
| Variance from Released | Subtracts the Actual Forecast from the Released Budget. (Released Budget - Actual Forecast). |
| % Variance from Released | Expresses the Variance from Released as a percentage (Variance from Released / Released Budget x 100). |

Columns

You can hide/show these columns by right clicking a cell and selecting Preferences>Cash Flow>Display Columns.

|  |  |
| --- | --- |
| **Line Items** | **Description** |
| Total to Date | Shows actuals and forecast to date in the closed and open periods. |
| Released Budget Total | Shows how much has been released out of the Total Budget so far in the project for this line item. |
| % of Total Budget Released | Shows how much has been released out of the Total Budget for that line item as a percentage. |

|  |  |
| --- | --- |
| **Line Items** | **Description** |
| Budget to be Released | Subtracts the Released Budget from the Total Budget. This column displays how much is left to be released out of the Total Budget for the line item. |
| % of Released Budget Spent | Shows how much has been spent against the Released Budget as a percentage. |
| % of Total Budget Spent | Shows how much has been spent against the Total Budget as a percentage. |
| Released Budget Outstanding | Shows how much remains to be spent against the Released Budget (Released Budget – (actuals + corrections)) |

Allocate Invoices

Go to Ribbon>Budget>Invoice Allocation and Corrections.

When you create a model in ARGUS Developer, you can make it as simple or as complex (many rows, multiple phases, etc.) as you wish. However, the degree of detail contained in your model may not necessarily match the level of detail held by your chart of accounts. This could result in a transaction having multiple places in the model where it could be placed or multiple transactions going to one place in your model.

To show actual transactions in the Budget Cash Flow is a two-stage process.

First the actual transaction data needs to be imported and is held in a temporary buffer using the Import Invoice Data function. Next, you have to allocate the transaction to the correct location within your model. Once the import process has finished, the Invoice Allocation and Corrections editor will be displayed.

Import an Invoice into a Closed Period

You can import an invoice into any period of your model. This allows you to display the transaction in the correct period of the budget cash flow even if an invoice was paid late or missed a previous import run into ARGUS Developer.

1. Go to Budget Cash Flow>Cell>Actuals.
2. Click Argus>Import/Export>Import Invoice Data.
3. Click **Next**.

Result: Select Data Source Pop-Up appears.

1. Select the Project Source and click Next. Result: Import Options Pop-Up appears.
2. Navigate to the file and click **Next**. Result: Warning Pop-Up appears.
3. Review any warnings and click **Next**.

Option: Click **Display Log** to view warnings in detail. Option: Click **Save Log** to save the Log on your machine. Result: Target Projects Pop-Up appears.

1. Click **Next**.
2. Please wait while the system adds source data to Projects. Result: Import Successful Pop-Up appears.
3. Click **Finish**.

Allocate Invoice To

1. Once the import process finishes, the Invoice Allocation and Corrections editor is displayed. The upper section lists the details of all the invoice transactions that have been imported.
2. The lower section displays one of the possible destination(s) the transaction can be placed within the model and allows you to allocate the selected invoice on the amount or % basis.
3. Click **Allocate** and the transactions are displayed in the Actuals row of the Budget Cash Flow. If you wish to allocate your transaction at a later date, click **Cancel** to close the editor then from the Budget ribbon. Click **Invoice Allocation** to re-open the editor.

Invoice Allocation and Corrections window

**Note:** If the lower section does not display a potential destination:

* + A row does not exist in your model for it to be allocated to. Add the rows to your model, then the transaction can be allocated.

OR

* + A cost code has not been assigned to the line item. Add the cost code directly from the Invoice Allocations popup.

Allocate a Phase Reference Number

1. Go to **Budget Ribbon>Allocation & Correction>Invoice Allocation**. Result: The Invoice Allocation and Correction popup appears.
2. Review allocated/unallocated phase reference numbers.

Option: Click the toolbar>filter to display only unallocated phase reference numbers.

1. Hover over any Warnings for unallocated phase reference numbers. Result: Displays message **Phase reference doesn't exist in any phase**.

Option: Click **Ribbon>Align Phase References**. Result: The Assign Phase References popup appears.

Note: If there is an issue with the phase reference number, for example it is an error in the source data, you must fix the error in the source file and re-import the invoice. Alternatively, you can go to Project>Timescale>Phase Reference and type the correct phase reference number.

1. Type any missing reference numbers in the Reference column and click **OK**. Result: Invoice is now allocated in the State column.

Assign a Cost Code to a Line Item Directly from the Invoice Allocations popup Note: This is a different method for assigning cost codes and is accessed from the Invoice Allocations window.

1. Go to **Budget Ribbon>Finance Cash Flow>Invoice Allocation**. Result: Invoice and Allocation and Correction popup appears.

#### Click on Toolbar>Assign a cost code to a line Item.

Result: Assign Cost Codes popup appears and displays all the line items **without a cost code** assigned.

1. Click the items that display **none** for each Phase and select the cost code in the pick list.
2. Click **OK**.

Result: The lower section of the Invoice Allocation and Correction displays the destination line item.

1. Click **OK** to apply these changes.

Variance from Budget

When allocating invoices, this is used to assist you in determining whether an invoice transaction should be placed in the model based on budget information you have selected from the **Allocate To** field.

**Example:** If the transaction imported for the period is the same as what has been budgeted for, there will be no variance, and there is a very high probability that the transaction is being placed in the correct part of your model. However, if there is a variance between the budget and transaction, there is less certainty that it should be placed in that part of the model. To further assist, this column is colour-coded:

Colour Codes

The colour codes are as follows:

* Green – variance is low, and it is likely that the transaction does belong to that part of the model
* Yellow – variance is higher than expected
* Red – variance is very different than expected, and it is likely that the transaction does NOT belong to that part of the model

#### Variance from Budget Limits editor

* 1. Navigate to the editor’s toolbar.
  2. Select **Edit>Variance Limits,** or click the **Budget** button to open the Variance Limits editor.
  3. Enter upper limits for the green and yellow bands only (it automatically populates the lower limit of the band).
     + **Lower Limit:** This column displays the lower limits for each variance limit. These fields are read only.
     + **Upper Limit:** This column displays the upper limits for each variance limit. You can only edit the first two fields.
     + **Status:** This column displays colour codes each variance limit.

Click **OK** to apply your changes to the variance limits.

#### Apply a Split Invoice Allocation

1. Go to **Ribbon>Budget>Invoice Allocation.**

Result: The Invoice Allocation and Corrections window appears.

1. Select an invoice row.

Result: The Allocate To model destinations displayed in the lower grid.

1. Type a percentage in the **% Allocation** field.

Result: The **Allocated Amount** field multiplies the percentage by the invoice amount (Net of Tax).

Note: You must always allocate 100% of an invoice. An Allocation Percentage greater than 100% generates an Error Message - Invoice over-allocated.

Option: Type amounts in the **Allocated Amount** fields.

Result: The Amount Allocated totals the amounts input, and any remainder still to be allocated is displayed in the Amount Unallocated.

1. Review the **Amount Allocated/Unallocated** fields.

Result: Invoice State changes from Unallocated to Allocated.

1. Click **OK** to apply your changes or **No** to discard them and close the Invoice Allocations and Corrections window.

Use **Edit/Reset Allocations** on the toolbar to undo any selections you have made. The transactions can be filtered by clicking the **Filter** button or selecting **Filter Rows**

from the toolbar.

#### Right Click Options

Right click on the **Allocated Amount** or **% Allocation** field and choose from:

* + **Allocate Budget Amount:** Allocates based on the value from the **Budget Amount** field. For example, if the **Budget Amount** field displays -$1,500, then the **Allocated Amount** field uses -1,500.
  + **Allocate Outstanding Amount:** If an invoice is not fully allocated, the value from the **Amount Unallocated** field displays. For example, if the Amount Unallocated filed displays -$2,400, then the **Allocated Amount** field uses -2,400.
  + **Allocate as Proportion of Budget Amount:** Splits the allocation proportionately based on the budget amounts and displays the percentage in the **% Allocation** field and the proportionate amount in the **Allocated Amount** field. For example, if the budget amount for an item is -$750,000 and that amount represents 5% of the budget, then the **Allocated Amount** field multiples -$750,000 by 5% to display $37,500.
  + **Use Allocation % from last time:** Splits the allocation proportionately based on the last allocation that was committed. For example, if you committed an allocation in January of 50%/30%/20% and now you have February actuals, you can click **% Previous Allocation**, and the system auto-populates the same 50%/30%/20% split.
  + **Clear Allocations for this invoice:** Resets allocations to 0/0.00%.

How to Correct a Misallocation of an Invoice

A Supervisor can change the allocation details for the same cost code and within the same period by following this procedure:

1. Go to the Budget Cash Flow report.
2. Right click the cell.
3. Select Invoice Drill Down.
4. Review the allocation.
5. Type the new allocation value(s) in the **Allocation %** field(s).
6. Click **OK**.

Result: Budget Cash Flow displays the new allocated amounts.

### Data Distribution

Spread Variance

Once your actuals have been imported and allocated to the correct place in the cash flow, you may find that you have spent or received monies that are more or less than what was forecasted, which will create variances. You have a choice of absorbing them into future forecasts or leaving the forecast as is.

Note: Variances for imported actuals of Contributions or Repayments cannot be spread.

**Note:** Prior to opening the Spread Variance editor, the latest Current Actuals Import date must match the month displayed on the local PC – this may mean closing earlier periods on the Budget Cash Flow until this condition is met. See also [Close Period](#_bookmark272).

Spread Variance Procedure

1. Click the **Budget Cash Flow Ribbon>Data Distribution>Spread Variance**. Result: The Spread Variance Editor appears. The editor is made up of a toolbar and three main sections.
2. Option: Click the relevant Warning in the Data Checker to directly open the editor.
3. Select a **cost code row** or multiple cost code rows in the Heading list.

Option: Click the **Filter pin** in the Cost Code column header and click the check boxes next to the cost codes you wish to include. Alternatively, you can click **custom** and define a filter in the Custom Filter popup based on selections, values, and AND/OR boolean operators.

1. Select a **radio button** in the **Variance section** in the top right corner: Option: Add to next distribution period

Option: Add to last distribution period

Option: Spread evenly over remaining distribution

Option: Spread proportionately over remaining distribution

1. Click the **Spread Variance** button. Result: Updates the chart below.
2. Click **OK**.

Editor Ribbon Commands Choose from:

* + Spread Variance
  + Edit
  + Help Spread Variance

The Spread Variance command contains:

* + **Preview:** Opens a Print Preview window of the Spread Variance Analysis chart.
  + **Save Changes:** Saves to the database and keeps editor open.
  + **Save Changes & Close:** Saves changes to the database and closes the editor.
  + **Cancel Changes & Close:** Cancels changes and closes the editor.

Alternatively, close the editor window and a Save Confirmation window will be displayed. Click **Yes**, to save or **No** to cancel the changes.

Edit

* Undo all changes: Resets to their previous state, any changes made to the Redistribution or Manual Adjustments.
* Clear the Auto-Adjustments: Clears the Redistribution row only
* Clear the Manual Adjustments: Clears the Manual Adjustment row only.

In addition, < > - navigation buttons select the previous or next item in the Headings drop-down list.

Help

The Help command gives you access to the Help menu. Pressing F-1 will also help the menu.

Spread Variance Variance

This section details the total variance between the Actuals/Forecast (b/f) and the

Actuals/Forecast (c/f). Where:

(b/f) = Brought forward. This is the actuals/forecast data currently saved to the database and becomes the starting point from which re-distributions and amendments to your model are made.

(c/f) = Carried forward. This is the updated Actuals/Forecast once any imported actuals, re-distributions and amendments have been applied to your model. Once saved to the database, it subsequently becomes the Actuals/Forecast (b/f).

Options for treating variance in your model

1. Accept the Actuals/Forecast (c/f) – no changes required to your model.
2. Make the Actuals/Forecast (c/f) EQUAL the Actuals/Forecast (b/f)- absorb the variance in the remaining forecasts.
3. Modify the forecast completely by making changes directly to the input editors as necessary.

The lower section of the Variance panel has four options which will allow you to re- distribute the variance. You may choose from the following options:

* + **Add to next distribution period:** If you select this option, the system will take the variance and add it to the next available distribution period
  + **Add to last distribution period:** If you select this option, the system will take the variance and add it to the last available distribution period
  + **Spread evenly over remaining distribution:** If you select this option, the system will determine the number of distribution periods outstanding, divide the variance by that number of periods, then add that amount to each individual distribution period.
  + **Spread proportionately over remaining distribution:** If you select this option, the system will divide the variance by the proportionate percentage of the remaining distribution periods then add to each individual distribution period.

Click **Spread Variance** to apply the selected option to the cash flow grid.

If you wish to work with another item in your model, use the Heading drop-down list to select another cost code.

**Note:** The Total Variance to spread when re-distributed can only be absorbed fully if it is less than the remaining forecast. However, if it is greater, any unabsorbed portion will remain and is reflected by the Total Variance to spread calculation.

Once you have completed your changes to the model, go to the Spread Variance menu bar, and select **Spread Variance** to select the relevant save option.

Note: In the bottom left corner of the Spread Variance editor, a status message indicates:

* If the spread needs to be fully spread (the variance must result in 0).
* If spreading is not possible because the timing is calculated by the application.

Note: When a line item with related items linked to it (e.g. construction contingency as a

% of construction costs) has any variances spread, the related items are automatically spread on the same basis.

Note: Variance Status messages appear in the Data Checker only in the Actual/Forecast view.

Cash Flow Grid

The cash flow grid displays information relating to the following, which are also found in the Budget Cash Flow. This section details numbers for the following line items:

* Budget
* Actuals/Forecast (b/f) – may not necessarily be same as the Budget
* Actuals
* Corrections
* Re-distribution – re-distributed variance
* Manual Adjustment – manually add a value to adjust the forecast. The following cells are read only:
  + For lines whose timing is calculated by the application – e.g. Rental Income
  + In closed periods
  + When there is no Actual Forecast (c/f) in the same period
  + When lines cannot be edited from the Project Cash Flow

1. **Note:** When entering a value into the Manual Adjustment row, consider whether it is a cost or revenue item and if it will have a positive or negative impact on the project.

|  |  |  |
| --- | --- | --- |
| **Item** | **Positive Impact If** | **Negative Impact If** |
| Cost | Entered as negative value | Entered as positive value |
| Revenue | Entered as positive value | Entered as negative value |

* + Actuals/Forecast (c/f)
  + Variance from Forecast (c/f)

Note: Lines that have auto-distribution or manual adjustment applied:

* + Become manually timed lines
  + Periods containing an actuals or correction value are locked on the Actuals/Forecast (c/f) line
  + Periods containing manual adjustments are locked on the Actuals/Forecast (c/f) line

Chart

The lower section of the Spread Variance editor displays a graphical representation of the Actual/Forecast (c/f) cash flow. The graph is divided into two sections, separated by the signpost bar. As you amend the distribution, the graphs change dynamically.

Contingency Fund Contingency Transfers Row

Contingencies are available for Monetary and Contingency Cost Codes. Monetary Cost

Codes with contingency transfers and all Contingency Cost Codes display the

#### Contingency Transferred row.

Contingency Transferred displays the amount transferred within a period. If there are multiple transfers within the same period, the total displays the sum of transfers (positive and negative). All transfers from a cost item display as a negative and to a cost item display as a positive.

Contingency Transfers are included in the **Approved Revisions** and **Revised Budget** totals. Increases to Revised Budget display as negative Approved Revisions and decreases to Revised Budget display as positive Approved Revisions.

Note: **Current Forecast** and **Actuals/Forecast** figures remain unchanged after a Contingency Transfer.

Transfer Contingency Funds

You can transfer funds in both directions between a specified cost and a contingency fund.

Parameters

* Only can transfer funds in open periods.
* Only can transfer funds between cost items and contingency funds.
* Cannot transfer funds between revenue items and contingency funds. Procedure
  1. Click the **Budget Ribbon>Data Distribution>Contingency Fund** button. Option: Right click and click **Transfer Contingency Funds - Period X**. The period number is the project period number.

Result: The Contingency Fund popup appears.

* 1. Select options for the following:

**Direction:** Click a radio button to define the from/to direction of the transfer.

**Contingency Fund:** Select the fund by name in the pick list.

**Cash flow line:** Select the line item by name in the pick list.

**Maximum amount available:** Read only. Displays the amount of funds available from the contingency fund/line item.

**Transfer amount:** Type an amount.

**Transfer entered amount:** Check box to transfer the amount. Check box only available if Transfer amount exceeds Maximum amount available.

**Reason:** You have the option to type a reason that explains the transfer.

* 1. Click Transfer.

History

You can view details of amounts transferred between contingency funds and cost code line items. This enables you to review details of transfers without running a separate report.

Parameters

* Can access from the Budget Cash Flow.
* Can view details for any cost item involved in a contingency fund transfer up to and including the current period.
* Can view details for any contingency fund involved in a contingency fund transfer up to and including the current period.

Procedure

* 1. Click the **Budget Ribbon>Data Distribution>History** button.

Option: Right click on a line item with Contingency Transfers and click

#### Contingency Transfer History.

Result: The Contingency Transfer History popup appears.

* 1. View details in Read Only columns:

**Cost Item:** Displays the cost code and name. **Direction:** Displays either To/From for recipient/source. **Contingency Fund:** Displays the cost code and name.

**Transaction Date:** Displays the day/month/year that the transfer took place in the Project Cash Flow report and reflects the period in the project when the transfer took place.

Note: Contingency Transfers can only take place in the current Open Period. Example: If the project began in July 2014 and the current Open Period is August 2014, the Contingency Transfer take places in August 2014.

**Amount:** Displays the amount of the transfer.

**Previous Value:** Displays the balance for the recipient before the fund transfer.

**Current Value:** Displays the balance for the recipient after the fund transfer.

**Reason:** Displays the text that the user typed.

**User Name:** Displays the user who initiated the transfer.

**Date Transferred:** Displays in date format day/month/year/hour/minute/second. This date only represents a log in the system of when the transfer was made.

However, this has no relation to the project.

Example: If a transfer takes place on 12 February 2018, the Date Transferred is 12 April 2018 and the project Open Period remains as August 2014. If another transfer is made 13 February, the project Open Period remains unchanged until that period in the project is closed.

### Budget Control

This section allows you close the selected actuals periods and to toggle between budget views. You may choose from the following commands:

* Close Period
* View

Open Period

An open period is defined by one or more of the following attributes:

* The time span since the last closed period to the current calendar date on your computer.
* If no closed periods, the time span since the project start date to the current calendar date on your computer.
* Importing of actual transactions (only occurs in an open period).
* Can be formed from one or many contiguous calendar months.

Close Period

The close period function allows you to permanently lock open periods to which actual transactions have been imported. These are usually synchronised with your accounting systems and rolled forward by one month. This creates your historic record for the project. This is reflected in the split of the Budget Cash Flow into the Actuals, Current Month, and Forecast sections.

To close a period, perform the following actions:

1. Click Budget Cash Flow Ribbon>Budget Control Period>Close Periods.
2. Select an option from the pick list: Close Current Period

Close 2 Periods

Close 5 Periods

Close Periods: Type/select the number of periods to close up to 72. Result: The Close Period popup appears.

Warning: The Can't close periods popup appears if any invoices are not allocated.

1. Click **OK**.

See Also: Import an Actual into a Closed Period

View

The view mode controls which version of the Budget & Project Cash Flow is displayed. Select a version to view:

* + **Actual/Forecast:** This is the default mode you will see when working on your project. It contains the allocated actuals up to and including the current open period and the corresponding forecasts for future periods.
  + **Original Budget:** This is the view of your project when the Original Budget was created. It is a copy of the Project Cash Flow and associated KPIs.
  + **Revised Budget:** This is a view of your project when the Revised Budget was created. It is a copy of the Project Cash Flow (including any allocated actuals) and associated KPIs.
  + **Current Forecast:** This is a dynamic view of the Project Cash Flow and allows you to make changes to your model.

### Budget Cash Flow grid

The Budget Cash Flow grid is structured in a similar manner to the Project Cash Flow grid. It contains a series of columns that details the properties for each individual line item of your model with a cash flow grid of the budgeted & forecasted project costs & receipts.

Heading

This column contains the description of the individual line item row in your model. These rows can be grouped by Cost Code Level to make presentation easier to read.

1. Select the Cash Flow ribbon.
2. Click on **Group**.

#### Select Budget Cash Flow>Group by Cost Code Level

1. Select the cost code level in the drop-down list.

Cost Code

This displays the assigned Cost Code for the line item row. You can filter which rows to display.

1. Hover your cursor over the cost code heading to display the filter icon.
2. Click on the filter icon.
3. Check the boxes to filter your grid.

Detail

This displays the budget detail headings for each line item row. All these rows are non- editable. The Budget Details are:

* + **Original Budget:** A static set of information about your project against which is compared to actual results to determine variances from expected performance to allow you to take remedial steps to bring actual results back into line
  + **Approved Revisions:** Agreed changes to the Original Budget.
  + **Revised Budget:** Changes to the Original Budget, a new static set of information against which your latest results are measured.
  + **Current Forecast:** The projection of a project’s future revenue, costs, financing and associated KPI’s.
  + **Actuals:** Any historical value, only imported from an external system.
  + **Corrections:** Actuals that relate to credit notes and credit journal entries.
  + **Actual/Forecast:** The current information about your project that combines actual transactions and future projections.
  + **Variance from Original (Budget):** Variance of Actual/Forecast against the Original Budget.
  + **% Variance from Original (Budget):** The percentage variance.
  + **Variance from Revised (Budget):** Variance of Actual/Forecast against the Revised Budget.
  + **% Variance from Revised (Budget):** The percentage variance. Filter Details

You can filter which details to display.

1. Hover your cursor over the Details heading to display the filter icon.
2. Click on the filter icon.
3. Check the boxes to filter your grid.

Notes

Notes can be added to the Budget Cash Flow wherever **Add** is displayed.

1. Click **Add** to display the Notes for the line item in the Budget Detail editor.
2. Enter text.
3. Click **OK** to close.
4. "Note" is now displayed against the line item.
5. To edit, click the cell to re-open the Notes editor. Completion Total

This displays the row total. To hide or display this column:

1. Right click in the Budget Cash Flow to display the context menu.
2. Select **Show**.
3. Check/Un-check the Total Column.

Alternatively, go to the Preference>Cash Flow>Show Row Total column window. Actuals

This displays the part of the Budget Cash Flow where actual transactions have been imported to create the static historic record of your project. When Close Period is applied, the Actuals columns roll forward by one month.

See Also: [Closed Period](#_bookmark272) Current Month

This displays the following information:

1. Total to Date – row total of Actuals periods.
2. Forecast to Completion – projected costs/revenue to project completion. Hide/Display Columns

To hide or display these columns, Open Preferences>Cash Flow>Display columns to hide or display these columns by checking the relevant heading.

Forecast

This displays the projected forecast values.

Budget Cash Flow Cycle

The view cycle selected for the Project Cash Flow is also applied to the Budget Cash Flow.

See Also

Project Cash Flow View Cycles

However, if the Current Month columns falls within the periodic cycle, you can split the periodic cycle into individual months to accurately indicate which month is Actuals or Forecast.

To split the periodic cycle:

1. Open Preferences>Cash Flow>Display columns.
2. Check/uncheck **Split Period Cycle into months** when period contains Forecast and Actual amounts.
3. Click **OK**. Example:

In the screen shot below, a quarterly (3 month) view. Note how this 3 month period has been split into three elements:

* 1. Jul 14- Sep 14 (3 months combined - Actuals). If the Split Period Cycle was checked, it would display the 3 months individually.
  2. Oct 2014 & Nov 2014 (2 month – Actuals)
  3. Dec 2014 (1 month – Forecast)
  4. Jan 15 – Mar 15 (reverts to 3 month cycle – Forecast)

## Budget Calculations

Navigation: Budget Ribbon

### Budgeting Calculations

Original Budget

Data source from Project Cash Flow or Finance Cash Flow

Approved Revisions

Data source from Project Cash Flow and added to the Original Budget

Revised Budget

Data source Actual/Forecast row from Budget Cash Flow

Current Forecast

Data source from Project Cash Flow (revised forecast)

Actuals

Data source from Actuals Import

Corrections

Data source from Actuals Import

Actuals/Forecast

Calculation blends the following:

* Actuals Import up to and including the Actuals Import period
* All cash flow forecasts after the Actuals Import period

Variance from Original Budget

Forecast - Original Budget = Variance from Original

Variance from Original Budget %

(Forecast - Original Budget) / Original Budget x 100 = Variance from Original

Variance from Revised Budget

Forecast - Original Budget = Variance from Revised

Variance Revised Budget %

(Forecast - Revised Budget) / Revised Budget x 100 = Variance from Revised

Total to Date (of actuals)

Σ ActualP1…….ActualPcurrent

(where P1 = 1st period of actuals, Pcurrent = current period actuals) Forecast to Completion

Row Total Column – Total to Date = Forecast to Completion

# Value Added Tax (VAT)

Navigation: Home Ribbon>Definition>Entry>Ribbon>Finance>VAT

Select the **VAT** command in the Finance group on the Home tab to apply Value Added Tax to any item already entered through the Definition or Cash Flow areas. If you cannot see the command, select the File tab >> Configuration >> General option. You can then check the **Include Value Added Tax screens** option.

Use this section to set the Global VAT rate, Global Recovery Rate, Recovery Cycle, and the first period in which VAT will be recovered.

You can switch the VAT calculations on or off by selecting the **VAT Calculations Active in Cash Flow** option. The settings you have made to VAT and recovery rates will be unaffected by this switch.

### Applying VAT

Use the VAT schedule to apply the global VAT options set or to enter specific VAT and Recovery rates for individual items.

The global VAT settings entered can be applied (and removed) to all items listed in the VAT schedule simultaneously using the commands on the tool bar.

To apply rates to all rows:

Select the **Apply Rates** command on the tool bar.

To remove rates in all rows:

Select the **Remove Rates** command on the tool bar.

### Default Settings

Global VAT Rate

This allows you to specify the VAT rate that will be applied to all items if you click on the

**Apply Rates to All Rows** button.

Global Recovery Rate

This allows you to specify the recovery rate that will be applied to all items if you click on the **Apply Rates to All Rows** button.

Recovery Cycle every

This is the periodic cycle on which VAT is recovered. So, for example, if it is recovered quarterly, the recovery cycle would be three months; if it is recovered annually, the recovery cycle would be twelve months.

1st Recovery Month

This allows you to specify the first month of the project in which VAT is recovered. So for example, VAT is first recovered in month two of the project if you specify two here.

The VAT rates applied are displayed, item by item, in the VAT Schedule. This schedule shows three columns: Heading, VAT Rate and Recovery Rate.

The VAT rate and recovery rates may be varied for any item. Change any of the rates by moving to the cell and typing a new value.

VAT calculations may be viewed in the Finance Cash Flow. See Also

Basic Finance

# Reporting

## Summary Report

File tab>Control Panel>System Settings>Preferences>Summary Home Ribbon>Project Summary

The Summary tab shows all Revenues, Costs, Interest Costs, and Profit Distributions in a single report that is updated in real-time whenever any data or assumptions are changed. The report is laid out with revenues at the top, followed by costs, with interest, profit and other performance measures.

The level of detail of information displayed in the report can be changed; for example, either a detailed or concise investment valuation can be displayed. You are provided with many options to control the content and formatting of this report. Please see the topic on Summary Preferences for a detailed explanation.

To change the content or layout

1. Select the **File tab>Control Panel>Preferences** button and click on the

**Summary** tab.

1. Change the content by making selections in the **Show Itemised Schedules** and

**Show Performance Measures** group boxes.

1. Change the formatting by making selections in the **Formatting** group box.
2. Click the **OK** button. To preview or print the report
3. Select the **Summary** menu option on the **Preview** button in the Reports group on the Home tab.
4. Change formatting and layout settings before selecting the **Print** command. To export the report to Excel
5. Right click on the report in the Summary tab.
6. Select **Export Summary Report to Excel** option.

## Performance Measures

Navigation: Home Ribbon>Performance Measures

The Performance Measures tab shows the returns for each finance Source in a Project, based on the currently active Phase/Group of Phases.

This view is a static, non-editable view of the current status of each Source, including the balancing account. If the balancing source is not showing zero contributions and/or profit, you should investigate the status of your other sources, as positive or negative balances in the Balancing Account tends to indicate incomplete profit distribution or under-funding of the project.

To show or hide columns

1. Click on the Column Detail Selector (\*) at the top left of the table.
2. Select the columns you want to show by checking the appropriate options.
3. Select the columns you want to hide by un-checking the appropriate options.

When you have selected the full number of available columns to show in the table, the column headings and the amounts within each cell may become truncated. This will happen when there is not enough room within each column to display all its data. In this circumstance, Developer can automatically set the column widths and show a scroll bar so that you may view columns to the far right of the table.

To auto-fit the columns to the screen width

1. Right-click anywhere in the table.
2. Select the **Auto-Size Column Widths** menu option.

Printing Performance Measures

A report of the Performance Measures can be either printed, previewed or exported to PDF by using the report buttons on the tool bar, or by right-clicking anywhere in the table and selecting the report option.

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
| Source of Funds | Text | Based on the status of entries made in the sources and other tabs in this window. |
| Auto Contribution | Amount | The total amount of money contributed to the Project by a Source, excluding any Timed (manually entered) Contributions. |
| Timed Contribution | Amount | This is the total amount of money contributed to the Project by a Source per the Timed Contribution entries in the Cash Flow view. |
| Total Contribution | Amount | This is the total of the auto and timed contributions for each source. |
| Balance Outstanding at Project End | Amount | Amount of contributions not repaid by the end of the project. |
| Contribution Repaid | Amount | The total amount of contribution repaid. |
| Interest | Amount | The amount of interest attributable to the source. |
| Fees | Amount | The amount of fees attributable to the source. |
| Preferred Return Accrued | Amount | The amount of preferred return accrued. |
| Preferred Return Paid | Amount | The amount of preferred return paid. |
| Preferred Return Unpaid | Amount | The amount of preferred return unpaid. |
| Clawback Provision | Amount | The amount redistributed from a general partner's profit when the preferred return or other hurdle rate has not been met for the other equity investors. |
| Earned Management Fee | Amount | The amount paid to the Developer as a fee for managing the project.  This fee is calculated as a percentage of total construction costs and is then included as an additional sum within those costs. The fee is paid by all parties, including the construction company, which is paid back out of project funds. The payment is reported as an additional profit to the construction company, increasing its IRR but without increasing the returns of the project overall. |
| Profit | Amount | The amount of profit that is distributed to this source during the course of the project. It includes any cash reserve that is distributed at the end of the project. |

|  |  |  |
| --- | --- | --- |
| **Heading** | **Type** | **Description** |
| Total Interest, Fees, Preferred Return & Profit | Amount | The total of interest, fees, preferred return and profit for each source. |
| Peak Financing | Amount | This is the maximum amount drawn on a loan, calculated from the Loan Balance line. |
| Peak Financing Date | Date | The date when the Peak Financing occurs. |
| Maximum Loan Ratio % | Percentage | The maximum cumulative draw down expressed as a percentage of the total commitment when a Fixed Contribution is entered for a funding source in the Structured Finance area. |
| IRR % | Percentage | The Internal Rate of Return, calculated on a monthly basis. Interest is only included if the switch on the assumptions - Finance tab is set to Include Interest in IRR calculations. |
| ROE % | Percentage | Return on Equity. This is the source's profit divided by their total contribution. |
| Equity Multiple | Amount | The equity multiple is based off the source's capital investment, interest & fees, capital repayments, inter-source transactions, and profit from lower-ordered distributions. |
| Tax on Earned Management Fee | Amount | Total amount of tax on Earned Management Fee for this source. |
| Tax on Profit | Amount | Total amount of tax on profit calculated for this source. |
| After Tax IRR% | Percentage | The Internal Rate of Return based on the profit after tax. |
| After Tax ROE% | Percentage | The return on equity based on the profit after tax. |
| Loan to Cost % | Percentage | The percentage is a loan risk ratio based on Total Development Costs including interest and finance/sales fees.  = Total Contribution / Total Costs |
| Loan to GDV % | Percentage | The percentage is a loan risk ratio based on Gross Development Value.  = Total Contribution / GDV |
| Loan to NDV % | Percentage | The percentage is a loan risk ratio based on Net Development Value.  = Total Contribution / NDV |

## Reports

**Printing Reports**

The reporting functions of ARGUS Developer have been completely redesigned, with a simpler interface, additional reports, and user-defined Report Groups for rapid printing of report packages for various audiences.

There are three main areas pertaining to the production of reports:

1. Report Setup: Allows for the creation of any number of report groups
2. Print Preview: Allows the user to view and configure individual reports or entire report groups
3. Report Options: Allows for setting preferences for page layout, report options, etc.

## Setup Report Groups

Navigation: Home Ribbon>Preview>Report Setup

To access the Report Setup area, click the drop down for **Preview Reports**, then select

#### Setup Report Groups.

The Report Setup screen shown below is focused primarily on defining Report Groups, which are user-defined collections of reports that are chosen from the list at the left.

More detailed options for control of individual report layouts are provided in the Report Preview area, which is described following this section.

In the left column of the screen, reports are grouped by type:

* Summaries
* Cash Flows
* Finance
* Analysis
* Audit Trail

For convenience, these can be collapsed and expanded the arrow on each group label.

### Setup Report Groups Commands

The commands in the Report Group Setup screen from left to right across the ribbon:

* **Preview:** View on screen either an individual selected report (you select a report here by clicking on any one from the list of reports), or a Report Group which is selected with the **Group** command on the ribbon.
* **New:** Creates a new, blank Report Group which by default is given the name Report Group 1. To view and edit the newly created Report Group, you must select it with the **Group** command on the ribbon.
* **Delete:** Delete the currently selected Report Group, as appears in the Group selection window. You are prompted before deleting a Report Group. Only the Report Group definition is deleted, not the reports themselves.
* **Copy:** Copies the currently selected Report Group. The default name given to the new Report Group is Copy of followed by the name of the copied Report Group. To view and edit the new Report Group created by the **Copy** command, you must select it with the **Group** command on the ribbon.
* **Rename:** Allows you to rename the currently selected Report Group, as appears in the Group selection window. This is accomplished with the renaming window as shown following:
* **Group:** This selection window allows you to switch from one Report Group to another, with the new selection becoming the currently active (selected) Report Group. Note that until one or more new Report Groups have been created with the **New** command, there will only be one Report Group available, with a default name of Default Report Group.
* **Add:** Creates a copy of the currently selected report in the left panel and places it in the list of reports in the right panel which is the collection of reports that makes up the currently active Report Group. Note that you can accomplish the same action by simply clicking and dragging a report name from the report list into the current Report Group window.
* **Remove:** Removes the currently selected report from the current Report Group window. You are prompted for confirmation before the report is removed. Note that you can accomplish the same action by simply clicking and dragging a report name from the Report Group window to the report list panel at the left.
* **Clear:** Clears all reports included in a Report Group window. You are prompted for confirmation before reports are cleared from the Report Group. At this point, you can once again add reports to the Report Group window.
* **Up:** Moves the currently selected report one position higher in the Report Group definition window. This will affect the order of printing.
* **Down:** Moves the currently selected report one position lower in the Report Group definition window. This will affect the order of printing.
* **Close Setup:** Returns you to the main Developer workspace.

## Print Preview

Home Ribbon>Preview Reports>Standard, Excel Analysis, Analysis, Setup Reports

The Print Preview window is accessible from both the **Preview** button in the main Developer workspace, and from the **Preview** button in the Report Group definition window. It provides for detailed control of how reports will be printed.

## Print Preview Ribbon

The ribbon commands from left to right in the Report Preview screen are described below:

### Print

**Print:** Opens a selection and setup window to control printer choice, its properties, number of copies and page range.

**PDF:** Prints a preview to screen in your default PDF reader, from which you can Save to file, and perform the range of functionality that your PDF reader/writer is capable of.

**Export:** This button provides a range of six options for exporting/saving the report(s) selected, as shown below:

* Export to Excel
* Export to RTF
* Export to HTML
* Save as HTML Document: Saves the report in the most recently accessed file location.
* Save as PDF Document: Saves the report in the most recently accessed file location.
* Save as RTF Document: Saves the report in the most recently accessed file location.

The first three options generate the report and open the default application associated with each, e.g., Excel, Word for RTF, and Internet Explorer for HTML. The bottom three options simply generate a file in each of the formats (HTML, PDF, and RTF), with a prompt for filename and location.

### Report Preview

**Options:** This button opens the Report Setup window.

**Group:** This selection box allows you to switch from one Report Group to another, with the new selection becoming the currently active (selected) Report Group in the Preview window.

**Report Date:** Defaults to the current date, but allows for arbitrary date change on report dates.

### Font

This section provides standard Windows font controls for type and size. These controls manage the text in the main body of reports.

### Page Setup

This section provides standard Windows controls for margins, page orientation, and page size.

Use the button expander arrow at its bottom right to open the following Report Setup window where additional reporting options can be configured.

### Page Layout

**Cover Page:** This drop-down list allows placement of the Cover Page as the first or last page of a Report Group, or not printed at all.

**Watermark:** This drop-down list allows the user to select from several standard watermarks, to use no watermark, or to create a custom watermark definition. Watermarks are generally brief, such as Do Not Copy or Confidential.

**Logo:** This drop-down list allows you to choose which parts of the report will be printed with a company logo. Choose from the following options: All Pages of the Report, Cover Page Only, No Logo.

The logo is a custom Bitmap (BMP) or JPEG (JPG) file, and is held in the Common\Reports\Logo sub-folder under the Argus Developer application folder. The default company logo file must be named Clientlogo.bmp or Clientlogo.jpg.

The **Alignment** command allows you to choose the position of the logo: to the left, right, or centre of the page.

**Caveat:** This drop-down allows the user to choose whether to create and display a custom caveat. Caveats appear at the bottom of each page.

**Header & Footer:** Select whether to print a header and/or a footer on each page. The content of headers and footers is controlled in the Headers & Footers tab of the Report Setup window.

### Zoom

**100 Percent:** Select this option to display the report on screen at in its normal size.

**Whole Page:** Select this option to display a full page of the report at a time.

### Preview Pages

**Previous:** Select this option scroll to the previous page of the report.

**Next:** Select this option scroll to the next page of the report. **First:** Select this option scroll to the first page of the report. **Last:** Select this option scroll to the last page of the report. **Close Report Preview:** Select this option scroll exit this screen.

## Report Setup

Navigation: File tab>Control Panel>Reports and Printing>Report Setup

The Report Setup window can be accessed in the **Control Panel** under **Reports and Printing**. Alternatively, this window can be opened from the Print Preview screen by clicking the button expander arrow at the bottom right of the **Page Setup** or **Page Layout** groups on the ribbon bar.

## Report Options

### Cash Flow View Cycles

The options available in the Cash Flow frame are described below:

**Cycle:** Select Monthly, Quarterly, Semi Annual, Annual or a previously defined custom cycle in the drop-down list of the **Cycle** field. The cycle will be initially set by the selection on the main Cash Flow ribbon, but can be overridden here.

**Budget Reports View:** Select Actual/Forecast, Original Budget**,** Revised Budget**,** Current Forecast**, or** Same as Budget Cash Flow. This field controls the type of actual/forecast and budget displayed in all Budget Reports.

### Page Options

**Print Headings on ALL pages:** The label chosen for each item in the cash flow will appear in the first column of every page on the Cash Flow report. To reduce the number of printed pages, you could uncheck this option. In this case, headings will appear only on the left-most pages of the report.

**Print Hidden Rows:** When checked any row that has been hidden will be included in the report. Un-check this option to reduce the number of pages in the report. Hidden rows are rows which are excluded from calculations.

**Print Row Numbers:** When checked, the line numbers allocated to each row in the Cash Flow will be printed.

**Print Totals Column:** When checked a totals column will be included for each row in the Cash Flow after the row headings column in the detailed and grouped Cash Flow reports.

**Print in 000’s:** The value printed in each period in the Cash Flow report is rounded to the nearest thousand. All interest amounts and column totals will also be printed in 000’s.

**Print Zero Rows:** When checked any row with a total value of zero will be included in the report. Un-check this option to reduce the number of pages in the report.

**Print Section Subtotals:** When checked a subtotal will appear for each section in the Cash Flow report.

**Print Unit Information Rows:** When checked includes sales unit information such as Construction Starts, Sales Starts and Sales Completions on the Cash Flow reports.

### Report Preview

**Preview Budget and Consolidated Project reports using current parameter settings**: When checked, Budget and Consolidated Reports display with current parameter settings.

## Report Content

### Budget Variance Report

**Budget Variance 'Budget' View:** Select Actual/Forecast, Original Budget**,** Revised Budget**,** Current Forecast**,** Same as Budget Cash Flow**, or** Same as Budget Reports**.** This field controls the type of actual/forecast or budget displayed in Column 1 for the Budget Variance Summary Report.

**Budget Variance 'Actuals' View:** Select Actual/Forecast, Original Budget**,** Revised Budget**,** Current Forecast**,** Same as Budget Cash Flow**, or** Same as Budget Reports**.** This field controls the type of actual/forecast or budget displayed in Column 2 for the Budget Variance Summary Report.

Click to switch the order of the Budget Variance View selections.

### Options for Report Sections

These options configure the appearance of certain report sections:

**Print ‘Part’ or ‘Phase’:** This choice controls the text used to describe phases. See also, Timescale and Phasing

**Add Debt Service to Net Operating Income:** When unchecked, the net operating income excludes the cost of mortgage interest, fees, and principal repayments.

Otherwise, Net Operating Income is reduced by these amounts.

**Include additional rent costs in Net Operating Income:** Check to display rent additions in the Revenue section.

**Print non-capitalised revenues and expenses in the Operated Asset report:** Check to print non-capitalised revenues and expenses in the Operated Asset report.

**Auto-size column widths in Performance Measure report:** Check to auto size all columns to the same width in the Performance Measure report.

**Auto-size column widths in Appraisal Summary report to full width of page:** Check to auto size all columns to the same width in the Appraisal Summary report.

### Timescale Graph Report Options

**Include Merged Phase Graph in Merged Phases View:** Select this option to produce a graph for the overall project when printing from the Merged Phases.

**Include Individual Phase Graphs in Merged Phases View:** Select this option to produce graphs for each of the individual phases in the report when printing from the Merged Phases.

**Include Stages with Zero Month Duration:** Un-check this option if you want to hide any stages that have no duration entered in the time scale.

**Show Period Numbers in the chart footer:** Select this option to move the period numbers from the top of the graph to the bottom.

**Show One Phase Bar in Merged Phases View:** Select this option to show a single bar for each stage, from the earliest stage start to the latest stage end, on the Merged Phase Graph. When not selected, a bar will be shown for each phase on each stage line on the Merged Phase Graph. This option can result in gaps appearing between the bars drawn for each stage which represent the time between phases.

## Page Setup

As shown above, the Page Setup tab provides options for the page margin units and dimensions, orientation of the pages, and paper size.

## Headers & Footers

### Headers

**Print Headers:** Select this option to display a header at the top of each reporting page. The header will contain the entry in the **Client Name** field as well as the primary and secondary titles of the project as entered on the Project page of the main Developer workspace.

**Client Name:** This field allows for entry of custom text to be displayed on the report header.

### Footers

**Print Footers:** Select this option to display a footer at the bottom of each reporting page. The contents of the footer are determined by the options selected below.

**Print Page Numbers:** Select this option to include page numbers in the report footer.

**Print Full File Path and Name:** Select this option to include the full file path and name of the project in the report footer.

**Print Time of Day:** Select this option to include the current time stamp in the report footer.

## Cover Sheet

A cover sheet for a report is important. It is the first part of a report that the reader will see. In Developer, you can print a cover sheet which contains high-level project description fields, as well as its address, the report date and the name of the person that prepared it.

You can use the **Cover Sheet** options to change the content and the layout of the cover sheet.

### Contents

You can include the property name and project description, as well as a reference number and the address. Select the option against each field to include it on the report's cover sheet.

To separate the property name and description from the address.

### Logo

Your company logo, or any other high-quality image, can be printed at the top of the cover sheet. You will probably want to print a larger image on the cover sheet where there is more space, and a smaller one at the top of other pages.

A logo can be any high-quality image in either Bitmap or JPEG format. The JPEG format is higher quality than a Bitmap and will produce a better printed image. All logo files must be stored in the Common\Reports\Logo folder.

To print a logo on the cover sheet

Select the **Print a logo on the cover sheet** option

To use the same logo on the cover sheet and report body

This option allows you to use the same logo image for the cover sheet and the report body pages. When you choose this option, the settings for logo appearance and position are taken from the **Page Layout > Logo** field on the Report Preview screen.

Select the Use default report settings for **Logo** radio button To use a different logo on the cover sheet

This option allows you to use a specific logo image on the cover sheet. To use this option, you must have at least one logo file in the Common\Reports\Logo folder. A logo file can be in either Bitmap or a JPEG format.

1. Select the Use custom settings for **Logo** radio button
2. In the **Logo File Name** field, choose the cover sheet logo
3. Change how the logo is positioned across the top of the cover sheet from the

**Alignment** field

### Line Style

When you include the address of the development on the cover sheet, it can be separated from the project description using top and bottom border lines.

To show borders around the address

1. Select the **Solid Line** radio button
2. In the **Colour** field, choose a colour for the borders
3. Change the weight of the border lines by either typing a weight or clicking the spin buttons

## Budget Reporting

Navigation: Home Ribbon>Preview Reports>Budget Reports>Budgets and Consolidated Projects

If you have a licence for the Snapshot module, you will have the following abilities:

* + Create budgets and import actuals
  + Monitor project development
  + Generate reports for multiple portfolios and projects See Also: Budget Cash Flow

## Budget Reports Ribbon Commands

You can also access these commands by right clicking in the Print Preview area.

|  |  |  |
| --- | --- | --- |
| **Section** | **Option** | **Description** |
| Print | Preview Report | Generates the selected report. |
|  | Print | Controls printer choice, properties, number of copies and page range. |
|  | PDF | Previews the report as a PDF. PDF functionality based on the default reader. |
|  | Export | Select a method to export/save the report:   * Export to Excel * Export to RTF * Export to HTML * Save as HTML Document * Save as PDF Document * Save as RTF Document |
|  | Page Setup | Set up margins, page orientation, and page size. |
| Zoom | 100 Percent | Displays the report at normal size. |
|  | Page Width | Matches the page width to the window. |
|  | Whole Page | Displays a full page of the report. |
| Preview Pages | Previous | Returns to the previous page of the report. |
|  | Next | Advances to the next page of the report. |
|  | First | Jumps to the first page of the report. |
|  | Last | Jumps to the last page of the report. |
|  | Close Budget Reports | Exits the Budget Reports window. |

## View Budget Reports

Navigate to Home Ribbon>Preview Reports>Budget Reports.

### Snapshot Reports

Licence Required: Budget Snapshot

Before You Begin

* + Confirm that the Database Settings option is set to Save reporting Key Performance Indicators... to display the KPIs in the reports.
  + Confirm that all projects are **saved to the portfolio** before running the reports the first time after upgrading from earlier versions of Developer. Save each project individually by selecting each project in the Backstage>Files screen and clicking **Save to Portfolio,** or save all projects by clicking Refresh All Projects.

|  |  |
| --- | --- |
| **Report** | **Description** |
| Actual Transactions Log | A detailed list of actual invoice transactions imported into the Budget Cash Flow. |
| Consolidated Budget Cash Flow | A detailed cash flow forecast with comprehensive ability to collapse/expand rows that shows projects with or without approved budgets.   * NPV figures in this report do not include any VAT paid or recovered. * For Budgeted Reports where actuals have been imported, set the View to Actual/ Forecast when comparing the cash flow figures in the report with the figures shown in Developer. |
| Consolidated Budget Summary | A portfolio/project summary of the budget, actuals and forecast that shows projects with or without approved budgets. |
| Consolidated Finance Structure KPIs | A comparison of structured finance KPIs for different projects or different finance structures within a project. |
| Consolidated Project KPIs | A project KPI report that shows projects with or without approved budgets. |
| Contingency Transfer History | A report that includes details of transfers to and from contingency funds and shows summary details of all contingency transfers that have taken place for specified projects. |
| Earned Value Analysis | Analyses the status of a project on any date to show whether the project is ahead or behind schedule and under or over budget. |
| Released Budget Cash Flow | A cash flow that only displays the budget and line item detail for the Released Budget. |
| Released Budget Summary | A summary of original budget, released budget, % of Total Budget Released, Revised Budget to Released, Actual to Date, % of Released Budget Spent, Released Budget Outstanding and Forecast to Complete. |

Example - Consolidated Budget Cash Flow

Click the hyperlink and select the **parameters** for generating the report.

|  |  |
| --- | --- |
| **Parameter** | **Description** |
| Portfolio | Select the portfolio(s) to include in the report. |
| Include Projects | Choose from:   * All * Budget Approved * Without Budget |
| Project | Select the project(s) to include in the report. |
| Start Date | Type/select a date.  Note: KPIs calculated in this report will be based on this start date, not the project start date in Developer. |
| End Date | Type/select a date.  Note: KPIs calculated in this report will be based on this end date and not the project end date in Developer. |
| Account Headings | Revenues Expenses  Finance |
| Time Period | Month  Quarter Year |
| Group 1 | Option: Select a parameter. |
| Group 2 | Option: Select a parameter. |
| Group 3 | Option: Select a parameter. |
| Group 4 | Option: Select a parameter. |
| Group 5 | Option: Select a parameter. |
| Group 6 | Option: Select a parameter. |
| Group 7 | Option: Select a parameter. |
| Group 8 | Option: Select a parameter. |
| Show Detail | Click **Parameters>Show Detail>XXX** to automatically expand selected sections when you generate the report. |
| Discount Rate | Type a rate to calculate KPIs for all portfolios/projects in the report. Note: If you change the rate, click on another parameter before previewing the report. |
| KPIs | Select the KPIs to display in the report.  Select **None** to hide the columns. |

|  |  |
| --- | --- |
| **Parameter** | **Description** |
| Amounts Reported As | Choose rounding method for values:   * Ones * Hundreds * Thousands |
| Negative Number Format | Choose the type of negative format to use in reports:   * Minus Symbol Format e.g. -999,999 * Accounting Format e.g. (999,999) |

## Generate Report

Click **Preview Report**.

Result: The report displays in the Report Preview area.

Note: If you select multiple portfolios/projects or large projects, report generation may take noticeably longer.

### Show/Hide

Click +/- Expanders to show/hide line items.

# Enhanced Excel Analytics

## Excel Integrated Analytics

The Excel template workbook included with ARGUS Developer v7.0 provides a simple way to export one or more Finance Structures from an ARGUS Developer v6.5 or later file to Excel version 2010 and up. The workbook provides dashboards, data tables, charts, cash flow reports and user-accessible data, formatting, and calculations. You can use the template as-is, or as the foundation for custom reports and analysis, utilising standard Excel formulas and formatting controls.

Other features of the Workbook include:

* + User-defined categories can be assigned to line items and used within each chart and table.
  + Workbooks may be easily refreshed with updated data from ARGUS Developer.
  + No macros, Excel Add-ins or other hidden processes of any kind are used, allowing for ease of access and modification by users.
  + Up to 50 Phases can be downloaded simultaneously any combination of structures within the 50 Phases is allowed. Maximum total project length is 240 months.
  + The ARGUS Developer file can have up to 10 Debt and 10 Equity Sources that are used by any or all of the individual finance structures.
  + Charts are dynamic as to project length and elements being charted you do not have to adjust the charts as to the data and timing that is being shown.
  + Each finance structure can be viewed independently, and can be combined into totals with the other finance structure(s) that are exported.
  + The ability to create your own worksheets or separate workbooks that reference the contents of the template through the use of standard Excel formulas, and links, respectively. Any changes and or additions you make and save to a particular workbook are retained for future sessions. Such changes made to a particular workbook are exclusive to that workbook – they do not affect other Excel Template workbooks or the originating Template itself.
  + Ability to maintain multiple versions of the Workbook, simply by doing a **File Save As** within Excel.
  + Ability to create and deploy your own Templates (xltx) files within the ARGUS Developer environment, by saving an Excel workbook as an Excel template in the designated Excel templates folder, as described following.

**Note:** The Excel template included with the product has been designed to only work with ARGUS Developer v7.00 and subsequent versions. Please contact ARGUS Software, if you wish to upgrade from an earlier version. Clients active on maintenance may upgrade to ARGUS Developer 7.0 at no cost.

Selecting a Phase Group for exporting to Excel Analysis Report Before exporting, the user has to select what data will be included.

In most cases, it is advised to select All Active Structures and Merged Phases. Following is a more detailed explanation.

When creating a new analysis workbook or updating an existing analysis, the data exported will be controlled by the selected Phase Group as well as the selected Phase tab. See Finance Structures.

Before making the selection, it should be noted that there are two styles of Phase Groups which have slightly differing effects on the export process to Excel. They are differentiated by their icons:

New Style Phase Group

Old Style Phase Group

The older style phase groups are from legacy versions of ARGUS Developer prior to version 6.0. The Excel Analysis reporting template introduced in Developer version 7.0 makes use of the new style phase group only.

If the user selects an old style phase group and performs a new or updated analysis reporting export, the FS\_Data\_Source worksheet will not be populated. Instead, a Data\_source tab will be created and populated. Note that none of the other worksheets within the Excel Template reference to the Data Source tab. They only reference the FS\_Data\_Source tab.

Phase Group and Phase tab selection is important when performing the Excel Analysis. Be careful not to confuse which selections are made. In addition, some exports are not allowed.

If you are using one of the newer phase group selections and have multiple finance phases, you must select the Merged Phases tab to be able to create a new or updated analysis report.

The following table provides a summary of Excel export options:

Phase Group and Phase Tab Selection choices for Excel Analysis Exports

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Old/New Style** | **Phase Group Selection** | **Phase Tab Selection** | **Number of Phases in Phase Group** | **Destination Sheet** |
| Old | All Phases / Default Structure | Merged | > 1 | Data\_Source |
| Single | 1 | Data\_Source |
| Old | Project Phase  Group/Default Structure | Merged | > 1 | Data\_Source |
| Single | 1 | Data\_Source |
| Old | All Infrastructure Phases | Merged | > 1 | Data\_Source |
| Single | 1 | Data\_Source |
| New | Finance Phase Group/User Defined Structure | Single | 1 | FS\_Data\_Source |
| Single | > 1 | Export Not Allowed |
| Merged | > 1 | FS\_Data\_Source |
| New | All Active Structures | Single | 1 | Active Structures not listed and Export Not  Allowed |
| Single | > 1 | Export Not Allowed |
| Merged | > 1 | FS\_Data\_Source |

Whatever finance structures are included in the Active list, you must still focus on the Merged Phases tab as discussed above in order for the relevant finance structures to be exported. The only exception to this is a finance structure that contains only one phase in this case, you would only need to ensure that the correct Finance Phase Group (Phase 1) / Finance Structure is selected – in essence, a single phase.

## Exporting into an Excel Template (xltx) file

Select the Finance Structure(s) you wish to export to the Excel template.

**Note:** If you have the Snapshot module licence, select the relevant Budget Control>View of the data to be exported. See Budget Cash Flow.

Ensure that the Excel Template Workbook file is not open in Excel. Excel may or may not be open prior to performing a download – if Excel is not running; ARGUS Developer will open it as part of the download process.

**Note:** If you have a licence for the Snapshot module and created an Original or Revised Budget, that data and structure is locked, and you cannot insert a new phase between previously defined phases into the model for the related, current forecast. However, you can add a new phase after the last phase, previously defined in your model.

**Note:** It is generally better not to have other large Excel files open when the download is running, depending upon the processor speed/memory available on your computer.

Click on the **Preview Reports** button to display reporting options and select the New Excel Analysis Report.

The New Analysis Report option will bring up the following Import and Export Data window that lists all the available analysis templates:

**Note:** Your ARGUS Developer v7.00 installation is supplied with the default analysis named: ARGUS Developer 7.0 Template for Excel.xltx. In the following (default) folder (or check if installed on a server): C:\Program Files (x86)\ARGUS Software\ARGUS Developer\Common\Excel Analysis.

* If you create modified versions of the standard Excel template above, you can save them as a template within Excel (it must have an xltx file name extension), and save them to the current folder location as displayed in the window in your own installation of ARGUS Developer;
* Once you select a template file from the above for downloading and the downloading process is complete, the resulting file is a standard Excel (xlsx) file, with a ‘1’ appended to the file name. The original template file is not altered.
* Once you have clicked the **Finish** button, Developer will display the following screen until the download process is complete:

Note: Click **Back** to view additional export options.

It is recommended that you do not disturb this download process, which should take a few minutes or less on most computers. In particular, do not do any activity with Excel until the process is complete, as ARGUS Developer requires control of Excel during the download process.

During the download process, the following actions are performed under ARGUS Developer’s control, in the following order:

* The selected template file is opened by Excel and an exact copy of it is made as a regular Excel workbook file, with the same name as the selected template plus a ‘1’ appended, and an ‘xlsx’ extension.
* The ‘FS\_Data\_Source’ worksheet within the selected template is cleared of all prior content, and updated with the data that is being exported from the current working ARGUS Developer v7.0 file; (note that the ‘FS\_Data\_Source’ worksheet is normally Hidden as it contains only the raw, un-formatted data from the export).
* A full calculation is performed on the file – the equivalent of manually pressing the F9 (Recalculate) button in Excel.
* The status of recalculation of the Excel file is set to Automatic. You can change this to Manual if you wish – it generally speeds up operations in Excel, but remember to force a calculation with **F9** when you make a change to the Excel file.
* The far left tab (Worksheet) of the Workbook is opened. The default far left Worksheet is the Finance tab, which is shown following.

#### Special notes about the export process:

* The resulting workbook has the same name as the selected Template plus a ‘1’ appended, and an ‘xlsx’ extension, making it a standard, non-macro enabled Excel Workbook.
* The resulting workbook is not saved; it is up to the user to save the file to a location of choice.
* Once the process described above is complete, ARGUS Developer has no further control over the workbook, and it does not require the continued presence or operation of ARGUS Developer.

Once the downloading to Excel process is complete, the above screen will disappear and you will be returned to ARGUS Developer’s workspace area.

At this point, you can switch to the Excel Workbook, which in its default configuration be focused on the ‘Finance’ tab, will look something like the following, depending upon the actual ARGUS Developer data set:

You can save the workbook file to any location/name you wish - see recommendation following. Such renamed files may be used as a target for future updating.

The export process is designed to work with Excel files that are based on the layout of the default Excel template file that is supplied with ARGUS Developer 6.5 and subsequent versions.

To facilitate ease of access of Template files (default and newly created) with downloaded content from ARGUS Developer v7.0, take note of the setting for ‘User Data’. See Folder Locations.

## How to Download into an existing Excel (.xlsx) Workbook:

Select the Finance Structure(s) and Phase(s) you wish to export to the existing Excel workbook.

Ensure that the Excel Workbook file is not open in Excel. Excel may or may not be open prior to performing a download – if Excel is not running; ARGUS Developer will open it as part of the download process.

**Note:** it is generally better not to have other large Excel files open when the download is running, depending upon the processor speed/memory available on your computer.

Click on the **Preview Reports** button to display reporting options and select Update Excel Analysis Report.

The Import & Export window will list the name of the workbooks in the User Data folder. Select the relevant file and click **Finish** to start the update process.

Initially, you will not have any template-based Excel workbooks (xlsx format) available, until you have downloaded into a template file (xltx format) and saved it as a regular (xlsx format) to a location of your choice.

Once the downloading to Excel process is complete, you will be returned to ARGUS Developer’s workspace area and be able to switch to the Excel workbook.

## Overview of contents of the Excel Template Workbook

The Excel Template workbook provides both summarised and detailed information on the downloaded ARGUS Developer file from a variety of perspectives. A listing of the key worksheets and a brief description of each is as follows:

The balance of worksheets in the workbook contain the data and extraction calculations that facilitate the presentation of worksheets noted above and are hidden to protect the integrity of the calculations. They can be viewed (and edited, but this is not recommended) by right-clicking on any worksheet tab, then select the worksheet you wish to view from the popup menu that appears.

Some operational guidelines when using the template:

* Excel Print Areas have been defined for the worksheets listed above, except for the table-style worksheets.
* Pop-up information has been embedded into many headers throughout the workbook, that operate much like tool tips in ARGUS Developer, except that you must click on the header first. These are included to expand on and clarify the header text.
* Data Group buttons have been used throughout the Excel workbook to alternately hide/un-hide rows and columns. Their presence is apparent when you see small numbered buttons or lines just to the top of and left of the column and row letters and numbers. This provides for an easy way to expand and contract the visible area of the worksheets depending upon the size of the ARGUS Developer file that has been downloaded. You can change the rows and columns that are included in the Data Groups with standard Excel commands (e.g., Data- Group-Group-Hide or Unhide).
* Some worksheets have areas which do not display or allow edits to selected formulas. This has been done to prevent accidental erasure or unintended edits. However, these protected areas are not password protected, so it is a relatively simple matter to unprotect and make visible and editable such areas. Editing, while possible, is not recommended without a thorough understanding of how the Excel template is structured. See Excel documentation regarding cell and worksheet protection.

### The Finance Worksheet:

This is the main focal point of the Excel template, as it provides a number of tables, charts, and a dashboard-style "window" for rapid analysis of your Developer file.

By default, the finance worksheet is the point of entry into the Excel template when an export is run. It contains a number of selectors to control what data appears in charts and in the cash flow Dashboard Windows.

The following shows a partial view (roughly the top third) of the finance worksheet, populated with an example of a 6 Structure ARGUS Developer project:

You can control the content of the charts and tables with the following highlighted selectors, starting at the top:

All Finance Structures:

Click in the green area to reveal a small down-arrow button to display a selection of all finance structures available or **ALL**

Cash Flow D &E Sources:

Choose from a large variety of Debt & Equity Cash Flow line items that will be used in the chart at left and in the Cash Flow window

View Cycle Selection:

Choose from the available options to display in the Cash Flow window. If less than all cash flow periods from your project are shown, which is possible depending upon the selection made, text in red will appear at the top of the Cash Flow window indicating this.

**Note:** The workbook must be recalculated for your selection(s) to take effect. Click

**Calculate Now** button (Configuration ribbon bar) or **F9**.

The following screen shows the middle section of the Finance Worksheet:

This section provides a Cash Flow Dashboard window for Mortgage information, and some key information and charts related to Cost and Revenue Distribution (the content of these are set in the Cost and Revenue worksheets).

The selection of what mortgage information to display is made in the highlighted selector entitled Mortgage line selection, while the View Cycle is set as per the **View Cycle** Selection.

The following screen shows the final section of the Finance Worksheet:

This section does not contain any view selectors; however, the content of the Equity and Debt tables and Charts are controlled by selections you make in the Equity and Debt Worksheets.

### The Project Worksheet:

The Project worksheet provides a high-level summary of KPIs for all Finance Structures currently downloaded in the workbook. The following is an example, populated with a multi-structure project:

In the screen segment above, there are no selectors, however, on the following segment representing the lower half of the Project Worksheet, there is a choice of three "pages" of information about the phases in the Project:

The highlighted selector box for the Summary of Phases provides for a choice of:

* Page 1 – Revenue, Cost, Pre Finance Profit
* Page 2 – Revenue Components
* Page 3 – Unit Areas, Ratios and Counts

### The Cost & Revenue Worksheets

In the Cost and Revenue Worksheets you can define your own Cost and Revenue Groups that will be used in charts and cash flows throughout the rest of the workbook.

Since the design and operation of each workbook is the same (except that there are fewer Revenue items), this section covers both cost and revenue worksheets. The example shown here is for the cost worksheet, but the same comments apply to each.

The top area of the Cost Workbook is shown below:

The areas with a green background are for user input and selection, as described below. The following describes the highlighted areas of the above screen:

Cost Groups:

You can create up to ten cost groups simply by typing the names (each must be unique) you wish to use for cost group categories in the charts and Cash Flows in this workbook. The cost group names you enter then become the list of valid selections in the Group Selection list area highlighted above. When you change or delete one or more names in the Cost Group list, you must ensure that the cost items listed under the Group Selection list are re-selected to reflect the new Cost Group item(s) – this is not an automatic process, they must be re-selected manually.

Under the Acquisition heading:

This list, which scrolls down, shows every available cost category cash flow item within the Project definition area of Developer, including all items that are not explicitly part of the Developer Definition screen. It does not include finance costs, which are dealt with in the Finance worksheet.

Custom Category Label:

You can type in how you want the labels under the Acquisition heading to appear in charts and cash flows within the workbook.

Group Selection:

When you click on a Group Selection item, a small down arrow button appears that will show a list of the items in the Cost Groups list above. Your selection here determines which item(s) will be included in any particular Cost Group. Every Group Selection item must have a selection made based on the contents of the current Cost Group list.

**Important:** as previously noted, when you change or delete one or more names in the Cost Group list, you must ensure that the cost items listed under the Group Selection list are re-selected to reflect the new Cost Group item(s) - they must be re-selected manually, this is not an automatic process.

### The Debt and Equity Worksheets

In the Debt and Equity Worksheets you can create your own Debt and Equity Groups that will be used in the appropriate charts and cash flows throughout the rest of the workbook.

Since the design and operation of each of these worksheets is the same, this section covers both Debt and Equity worksheets. The example shown here is for the Debt worksheet, but the same comments apply to each.

The top area of the Debt Worksheet is shown below:

The areas with a green background are for user input and selection. Debt Source Groups:

You can define the description of the 10 Debt Source Groups that are available simply by typing the names (each must be unique) you wish to use for Debt Source Group categories in the Charts and Cash Flows in this Workbook. The Debt Source Group names you enter then become the list of valid selections in the Group Selection list area highlighted above. When you change or delete one or more names in the Debt Source Group list, you must ensure that the Debt Source items listed under the Group Selection list are re-selected to reflect the new Debt Source Group item(s) - they must be re- selected manually.

Status:

For each Debt Source Group, each item can toggle between **Active** or **Off**. If a Group is **Active**, then it will be included in Charts and Cash Flows that use this section, throughout the rest of the workbook.

Group Selection:

When you click on a **Debt Group Selection** item, a small down arrow button appears that will display the list of the items defined in the Debt Source Groups. The selection determines which item(s) will be included in any particular Debt Source Group. Every **Debt Group Selection** item must have a selection made based on the contents of the current Debt Source Group list. **Important:** as noted previously, when you change or delete one or more names in the Debt Source Group list, you must ensure that the Debt

Source items listed under the Debt Group Selection list are re-selected to reflect the new Debt Source Group item(s) - they must be re-selected manually, this is not an automatic process.

### The Cash Flow Worksheet

The top part of the Cash Flow worksheet contains a high level overview of the ALL Finance Structures, or only the selected finance structure as per the selection in the Finance worksheet. In addition, it provides a breakdown of the revenue, cost and equity and debt source elements that have been selected in the worksheets of the same names, which is based on the current finance structure selection in the finance worksheet. The following screen shows the top segment of the worksheet that is currently displaying a user-selectable **View Cycle**.

Use the drop-down selector outlined in red to select from a number of different **View Cycles**. Notice that the # of Months and Period Ending headers are highlighted in yellow when the **View Cycle** is less than 12 months in the current column.

## The Cash Flow worksheet contents are user-configurable in the following ways:

Revenue section:

The categories and the line items they contain are as defined in the Revenue worksheet.

Cost section:

This section contains only project cost items (as distinct from finance costs defined in the Finance Structures area of Developer). The categories and the line items they contain are as defined in the Cost worksheet.

Debt Sources section:

The categories and the line items they contain are as defined in the Debt worksheet.

Note that there are no totals provided for all selected categories, since totals are often inappropriate where, for example, selections have been made for contributions, repayments and profits.

Equity Sources section:

The categories and the line items they contain are as defined in the Equity worksheet. Totals for each category are displayed. Note that there are no totals provided for all selected categories, since totals are often inappropriate where, for example, selections have been made for contributions, repayments and profits. Providing totals for this example of selected items (and for many other combinations) could be misleading.

### The Table Worksheets

There are seven worksheets in the template that provide tabular information on various aspects of any given ARGUS Developer project file that is downloaded. The tables include a significant amount of assumptions and calculated data that has been extracted from the FS\_Data\_Source worksheet and is provided for users who wish to develop their own analytical and informational reporting. The data is in simple list form, with a minimal amount of formatting and no Print Area definitions.

The Table Worksheets are:

Limitations of the data sets are shown above, and are designed to accommodate an estimated 98%+ of all ARGUS Developer v7.0 projects.

A segment of a typical Table type Worksheet is shown below:

The included data is quite extensive with the tables typically scrolling down and right. Modification Guidelines

ARGUS Developer users will likely wish to use the Excel analysis workbooks as a basis for custom reports which may be updated to refresh the data from ARGUS Developer models. There are four methods to consider:

**Option 1:** do direct modifications to existing workbook (not recommended), as we cannot support templates that have been modified in any way.

**Option 2:** add new worksheets to existing file and reference existing content using standard Excel functionality.

**Option 3:** create a new Excel Workbook then reference existing content – this will create links that work well, but there are some caveats, such as changing the name/location of the file being referenced with the links. This requires a clear understanding of how links work within Excel.

**Option 4:** use the series of data table worksheets that are included with the template to develop your own reports and analysis – note that this requires a relatively high level of Excel expertise.

# Analysis

## Sensitivity Analysis

Navigation: Home Ribbon>Distribution & Analysis>Sensitivity Analysis

### Overview

The Sensitivity Analysis module highlights the impact of making changes to one or many variables. Small changes in some variables can have a significant impact on the overall profitability of the project. You can view these impacts in the Key Performance Indicators.

Variability

* Up to six fields can be changed simultaneously.
* Each field can be varied by up to fifteen different steps.

Calculation

To calculate the changes for each variable, the analysis:

1. Applies steps up/down from the input’s current value
2. Shows results for varying each input, including the mid-point where the value does not change.

Categories

The table below shows categories and fields available for inclusion in a Sensitivity Analysis.

|  |  |
| --- | --- |
| **Category** | **Fields** |
| Construction | Number of Units  Rate / square foot or meter Gross Unit Area  Gross Area Cost / Unit Gross Cost  Starts / Cycle |
| Construction Breakdown | Fixed Amount Related %  Rate / Gross square foot or meter Rate / Additional square foot or meter Cost / Parking Space  Cost / Unit |
| Land Value | Fixed Land Value  Residualised Land Value |

|  |  |
| --- | --- |
| **Category** | **Fields** |
|  | Residualised Land Value for Finance Structures |
| Linked Analysis | Grouped Fields |
| Operated Assets | Asset Description |
| Rates | Growth/Inflation Rates  Interest Rates |
| Rent | Rate / square foot or meter Net Unit Area  Net Area MRV / Unit Total MRV  Yield |
| Sales | Rate/ square foot or meter Net Unit Area  Net Area Sales/ Unit  Gross Sales |
| Sales Velocity | Initial Sales  Sales Prior to Construction Sales During Construction Sales After Construction  Balance of Sales / Cycle |
| Stepped Rent | Rate / square foot or meter MRV / Unit  Total MRV |
| Time | Stage Duration |

To calculate the changes for each variable, the analysis takes steps up and down from its current value. This gives results for varying each input, including the mid-point where the value does not change.

## Creating a Sensitivity Analysis

Click **Sensitivity Analysis** on the tool bar. The screen is set out in three distinct areas:

* + **Tool Bar:** Contains all commands to create/edit a sensitivity analysis scenario.
  + **Field Category Selector:** Adds/removes fields to/from the analysis.
  + **Field Detail Table:** Controls the variable steps and includes/excludes occurrences of the field.

## Viewing the Analysis

When the analysis has completed all calculations, the results are displayed on the Analysis Results Table.

**Note:** The Analysis Results table can also be exported into MS Excel by clicking **Print to Excel**.

### Analysis Results

The Analysis Results Table shows the results of the separate valuations. Developer uses the amount on the top row of the cell as a basis for comparing the cell values against the base values when colouring the cells.

Result cells are colour-coded:

* **Dark Green:** Results do not change from base case.
* **Light Green:** Results better than base case.
* **Light Red:** Results worse than base case.
* **White:** Results match base case. Display Options

#### Display result cells with no colour coding: Uncheck Options>Colour Result Cells.

* **Display results for monetary amounts without currency formatting characters:**

Uncheck **Options>Format Result Cells**.

### Key Performance Indicators

In the Analysis Results Table, you can select two Key Performance Indicators (KPIs) in each cell by clicking on them in the pick lists at the top of the table:

* + The first pick list selects the KPI for the cell’s top row.
  + The next pick list selects the KPI for the cell’s bottom row. KPIs available for selection:
  + Development Yield %
  + Equity IRR% (Equity)
  + Equity IRR% (Developer)
  + Gross Development Value
  + Gross Margin %
  + Gross Sales
  + Land Cost
  + Net Development Value
  + Net Present Value
  + Profit Amount
  + Profit Erosion
  + Profit on Cost%
  + Profit on GDV%
  + Profit on NDV%
  + Project Equity IRR%
  + IRR%
  + Peak Financing Amount
  + Peak Financing Date
  + Project Return on Equity%
  + Rent Cover
  + Return on Equity% (Equity)
  + Return on Equity% (Developer)
  + Stabilised NOI
  + Total Interest & Fees
  + Total Interest Incl Mortgage
  + Yield on Cost %

### Analysis Cell View

When viewing the analysis results table, you will see the calculated values for each of the KPIs. You can view variances between:

* + Starting base value
  + Calculated results

You can view these variances as either:

* + Fixed difference
  + Percentage difference

### Viewing Three or More Fields

When viewing three or more field types, they are represented by a slider at the bottom. To view results for different steps, drag the slider's pointer to the left/right. Results are updated.

**Note:** The base value is indicated by an outlined, coloured box under the slider.

### Printing the Analysis

Click **Preview/Print** to print a report of the analysis results table and all assumptions.

**Note:** If the analysis has not been run, the system calculates results before generating the report.

**Note:** To print additional result variables, change performance measures in the Analysis Results screen, then reprint.

**Note:** The Analysis Results table can also be exported into MS Excel by clicking **Print to Excel**.

### Exporting the Analysis

Navigate to **Toolbar>Edit>Export**.

You can export analysis results tables as:

* + MS Excel
  + Acrobat PDF
  + MS Word
  + HTML

### Updating the Project

The sensitivity calculations and results are held separately from the main project. However, you can force the project to adopt the variables that produce any of the measures shown in the analysis results table.

The project fields will be changed permanently and the project recalculated to reflect the Land Value, Profit%, etc. shown in the Sensitivity Results table.

To update the project from the analysis, select the cell whose results you want to adopt, then click **Update** on the Toolbar.

You can also double-click the result cell to update the project.

Result: A Message window asks you to confirm that you want to update the project. Click **OK**, and the project updates.

### Linked Analysis - Grouped Fields

When fields belong to similar categories, e.g. rent rate and stepped rent rate, and you want different steps on each field, you can include two different fields on the same row, column, or slider by clicking **Linked Analysis**.

This reduces the number of different variable slider controls shown on the Analysis Results tab.

If you select **Grouped Fields**, you can add up to six individual fields to it. For each field added to **Grouped Fields**, the following are available:

* + Individual step types
  + Step rates
  + Step direction

When the Sensitivity Analysis has been calculated, the Analysis Results tab shows results aggregated and displayed as Grouped.

## Creating a Sensitivity Analysis

Navigation: Home Ribbon>Distribution & Analysis>Sensitivity Analysis

You create a Sensitivity Analysis by adding data fields to the Sensitivity fields list on the Setup tab.

To add a field, select the **Add Sensitivity Field** command. The Select Sensitivity Field window will be shown to enable you to add fields.

As you move the mouse cursor over each of the fields on the right side of this window, you will see information about the field in the Status box below. This will tell you, for example, why a particular field is not available for use in the analysis.

When the field has been added to the sensitivity analysis, you can then choose how the field will be varied in the calculations.

Number of Fields

There are six fields you can choose simultaneously in a single analysis scenario. There is no restriction on what type of fields they are. You could, if you wish, choose several **Time** fields, each calculating on a different development stage.

Step Type

The **Step Type** field offers four different ways in which to change each variable in the analysis. Each variable can be varied by either a fixed amount or by a percentage of the original value. When a step type is not applicable to the selected field, it will not be available for selection in the **Step Type** field.

|  |  |
| --- | --- |
| **Step Type** | **Description** |
| Fixed | The field's value will be changed by a fixed amount for each calculation step. E.g. changing a Rent Rate by a step of $5 per square foot. |
| Percentage | The field's value will be changed by a percentage of the original amount for each calculation step. |
| Manual Fixed Steps | The field's value will be changed by different fixed increments/decrements for each calculation step. You specify the fixed value for each step. |
| Manual Percentage Steps | The field's value will be changed by different percentage increments/decrements for each calculation step. You specify the percentage value for each step. |

When changing a field whose value is expressed as a percentage, for example yields or interest rates, it is best practice to use fixed steps to ensure a variance of a number of basis points. Using the Percentage step type for these types of fields will calculate a percentage of a percentage.

Step Amount

The amount by which each field will be changed on each step of the analysis can be entered here. Choose either a fixed step, where each increment is a fixed amount, or a percentage step, which varies by a fixed percentage of the original amount.

Manual step types can be used to enter the exact amounts by which each field will be changed. In this way, it is easy to change a field's value by a different amount for some or for all calculation steps. The step values can be all negative, all positive, or a mix of both. This enables downwards, upwards, or both downwards and upwards sensitivities to be calculated for the field.

The manual step changes will be entered into a table that appears to the right of the field details. There are two tables, one for Fixed Manual Steps and another for Percentage Manual Steps. Only one will be shown at a time.

Each of the amounts that are entered into the table will be used to calculate variations from the original value. They are not increments on the previous step, unlike the Fixed or Percentage step types. If you wanted, for example, to change a field by an amount of +2 for each step, you must follow the pattern of entries in the Correct column in the table below.

|  |  |
| --- | --- |
| **Correct** | **Incorrect** |
| 2 | 2 |
| 4 | 2 |
| 6 | 2 |
| 8 | 2 |

Step Direction

The direction in which each variable is changed has been expanded in Version 5 to include Up Only, Down Only, or Up and Down. Prior to Version 5, the program allowed only Up and Down steps.

|  |  |
| --- | --- |
| **Step Direction** | **Description** |
| Up Only | Increases the original value by the step amount for each step of the Analysis. |
| Down Only | Decreases the original value by the step amount for each step of the Analysis. |
| Both Up and Down | Decreases the original value for the first part of the Analysis and then increases the original value for the remainder of the Analysis. |

The default selection when you add a new field is Up and Down. To change the step direction, make a selection from the **Step Direction** field:

Number of Steps

Up to fifteen steps can be used to vary a field in the analysis. The default setting for the number of steps when you start a new project is 5. You can increase the number of steps on the Scenario Options window which you can view by clicking on the Options menu and selecting **Scenario** options. Change the **Step Count** fields to a value between 1 and 15.

Including fields

When you have chosen the field type that you want to sensitise, you can choose which particular occurrences of that field will be included in the analysis. For example, you might want to sensitise on the residential apartments, but leave out the apartments in one phase because they have all been pre-sold.

You include a field by checking the **Include** option against the field heading.

The commands **Include All** or **Exclude All** can be used to quickly select or deselect all areas and/or phases to be used in the sensitivity analysis.

## Sensitivity Options

Home Ribbon>Distribution & Analysis>Sensitivity Analysis>Options

Sensitivity options are available to increase the flexibility of the analysis component, and to decrease the number of data fields that need to be filled in. You can access the options using the Scenario Options window which you can find on the Options menu.

Allow per Field Step Control

If you would like to control the number of steps that will be used in calculating each of the fields in the analysis, check this option. When you close the options window, a new field will be shown on the Setup tab that will allow you to enter the number of steps. You may choose to vary one field with, say, five steps, while another field will be varied by ten steps.

The default is for this option to be OFF. Include New Items

Most projects will change with respect to the number of floor space definitions, phases, interest rates etc. as time progresses. If you make changes to the project definition after you have set up the sensitivity analysis, there is a chance that you could forget to add any new fields to the analysis.

To force Developer to automatically update the sensitivity analysis when new field items are added to the project, set this option to ON.

To control how this works on a field by field basis, set the **Allow per Field Include New Items Control** to ON.

Allow per Field Include New Items Control

If you want to control which sensitivity fields will have new items automatically added to them, set this option to On

This option works only on the fields that are included in the sensitivity analysis at the time of adding items to the project.

The default setting for this option is OFF. Include Infrastructure Phase Items

If you have set up any infrastructure cost phases using the option Infrastructure Cost Phase in the Timescale and Phasing area, you may include them in the sensitivity analysis. The Setup Tab will show these phases in the field selection lists for any of the fields where phase data is presented for selection. The default setting for this option is ON.

Step Count

The **Step Count** field is used to set the default number of steps to be used in the calculations when you want the same number of steps for all fields in the analysis. The default setting for this field is five steps.

Lock Gross : Net Ratio

This option is used to maintain a constant efficiency for an area record by locking the gross to net ratio when either the **Gross** or the **Net** fields are being sensitised. This option will override the individual setting on each of the area records included in the analysis.

Timescale Options

These options determine what will happen to the data when the **Time** field is included in the sensitivity analysis. It tells Developer how to manipulate data distributions when project timings change.

The three types of timing that are included are:

* Specific Dates
* Specific Periods
* Items Relative to Project Dates (i.e. Project Start Date) When running the analysis, you can elect to
* Keep the items at their specific dates, periods, or project offsets
* Or
* Adjust the items to keep them relative to the rest of the phase

The second of these options is selected by default so that items are automatically moved with the varying time scale.

See Also

Timescale Validation

## Before Running the Analysis

Before proceeding with the analysis, there are a few points to consider, as these may affect the results of the calculations.

1. If the project is using Basic Financing with a Single Interest Set, it will not be possible to choose individual interest sets for variation in the analysis.
2. If the **Time** field has been chosen, the program may not calculate any variations when Interest Rates have not been entered.

The following Warning conditions will be identified and displayed.

* + An **Interest Sensitivity** field does not have a Debit Rate or a Credit rate option checked
  + The residual target mode is based on development yield and there are no annual rents in the selection
  + A Grouped Field Sensitivity does not include any fields

You may choose to ignore any warnings and proceed to calculation of the Analysis Results.

The following Error conditions will be identified and shown:

* + A Finance Structure Sensitivity analysis is not run from the Merged Phases tab
  + More than one Time Sensitivity fields are linked to the same Stage in Timescale and Phasing
  + The Highest or Lowest steps for a Time Sensitivity field produce an invalid data distribution in the Cash Flow

## Running the Analysis

Home Ribbon>Sensitivity Analysis>Analysis Results

After the Pre-Select has been passed, the Sensitivity Analysis can be started by selecting the Analysis Results tab. Developer will now calculate a separate valuation for each of the field and step combinations.

**Example:** A three field analysis with each field varied by five steps, will produce 5 x 5 x 5 = 125 different valuations.

For a sensitivity analysis with a large number of variables or steps, the calculations could take a considerable time. Before Developer starts the calculations, a warning window will be shown to inform you of this possibility. You can choose to stop the analysis at this point and change the number of fields or steps, or you may continue.

While the analysis is calculating the results, a progress meter is displayed at the bottom of the screen, with a estimated duration for the analysis. You can stop calculation at any time by clicking on the **Cancel** button. If you do cancel the calculations, the program can display a partial set of results.

## Viewing the Analysis

Navigation: Home Ribbon>Distribution & Analysis>Sensitivity Analysis>Analysis Results

When the analysis has completed all calculations, the results are displayed on the Analysis Results tab. The Analysis Results Table shows the results of the separate valuations.

The result cells are colour coded as follows:

* + Dark Green = Current Project Result - No change in any of the variables.
  + Light Green = Results are better than base case.
  + Light Red = Results are worse than base case.
  + White = Results are same as base case.

To display the result cells with no colour coding. in a plain white background, uncheck the Colour Result Cells menu option on the Options menu. To display the results for monetary amounts without any currency formatting characters, uncheck the Format Result Cells menu option on the Options menu. Developer uses the amount on the top row of the cell as a basis for comparing the cell values against the base values when colouring the cells.

### Selecting Key Performance Indicators

In the Analysis Results Table, it is possible to display two Key Performance Indicators (KPIs) in each cell. The Key Performance Indicators are selected using the two drop- down lists at the top of the table:

The first drop-down field selects the KPI to be shown on the top row of the cell, the next drop-down field selects the KPI to be shown on the bottom row of the cell.

The list of KPIs available for selection in both drop-down lists is shown below:

* + Development Yield%
  + Equity IRR% for each Equity source
  + Gross Development Value
  + Land Cost
  + Net Development Value
  + Profit Amount
  + Profit Erosion
  + Profit on Cost%
  + Profit on GDV%
  + Profit on NDV%
  + Project Equity IRR%
  + Project IRR%
  + Project Return on Equity%
  + Rent Cover
  + Return on Equity% for each Equity source
  + Total Interest and Loan Fees
  + Total Interest (including Mortgage)

### Analysis Cell View

When you are viewing the analysis results table, you will normally see the calculated values for each of the KPIs. You can if you wish, choose to look at the differences between the starting base value and each of the calculated results. In this way you can get an extra insight into how changes in the sensitivity fields produce variations in the project results. The variance between the result in each cell and the base value can be displayed as either a fixed difference or a percentage difference.

### Viewing Three or More Fields

When there are more than two field types included in a Sensitivity Analysis, the third and subsequent fields will be represented by a slider at the bottom of the table. To view the results for the different steps, drag the slider's pointer to the left or right. As this happens, the results are immediately updated. The base value is always indicated by an outlined, coloured box underneath the slider.

### Printing the Analysis

You can print a report that contains the analysis results table and all the assumptions by clicking on either the **Preview** or **Print** commands. If the analysis has not yet been run, the results will be calculated before the report is generated.

**Note:** If you want to print additional result variables, change the performance measures displayed in the Analysis Results screen. Then reprint the Sensitivity Analysis.

The analysis results table can also be exported into MS Word by clicking on the **Print to Word Processor** command.

The analysis results table can be exported into MS Excel by clicking on the **Print to Excel** command.

You can create an Acrobat PDF file of the analysis results table by clicking on the **Print to Adobe Acrobat PDF** command.

Alternatively, the analysis results table can be saved as an HTML file by clicking onto the

**Print to Web Page (HTML)** command.

### Updating the Project

The sensitivity calculations and results are held separately from the main project. However, you can force the project to adopt the variables that produce any of the measures shown in the analysis results table.

The project fields will be changed permanently and the project recalculated to reflect the Land Value, Profit% (and so on) shown in the Sensitivity Results table.

To update the project from the analysis, move to the cell whose results you want to adopt, then click on the **Update** command on the Toolbar.

You may also double-click in the result cell to update the project. You will be asked to confirm that you want to update the project before the update takes place.

### Linked Analysis - Grouped Fields

If you want to include two different fields on the same row, column or slider on the Analysis Results Tab, the **Linked Analysis** option is available. You would use this when the fields belong to similar categories - for example, Rent Rate and Stepped Rent Rate and you want different steps on each field. The effect is to reduce the number of different variable slider controls shown on the Analysis Results tab.

When the **Grouped** Fields have been selected, you may add up to six individual fields to it.

For each of the fields added to the **Grouped** Fields, individual step types, step rates, and step direction are available.

When the Sensitivity Analysis has been calculated, the Analysis Results tab will show the results aggregated and displayed as "Grouped."

## Analysis Scenarios

Navigation: Home Ribbon>Sensitivity Analysis>Setup

You can create an unlimited number of scenarios for sensitivity analysis within the same project file. This makes it easier to run several sensitivity analyses on the same project multiple times, without having to set up the different variables or maintain different files.

Each scenario holds a complete set of assumptions and settings for a sensitivity analysis. Each scenario is independent of all other scenarios.

### Adding a Scenario

You can add scenarios using **Add Scenario** on the tool bar.

When a new scenario is added, the Scenario Name window is shown so that you may enter a name for the scenario. You must enter a unique name here and a check will be made on the name to ensure its uniqueness. If the name is not unique, you will be asked to enter another

When adding a new scenario, you would start on a blank Sensitivity Analysis screen, in the same way that you would when entering the Sensitivity Analysis screen for the first time. You can enter in all of the variables for your sensitivity analysis in the normal way.

### Deleting a Scenario

You can delete scenarios using **Delete Scenario** on the tool bar.

### Copying a Scenario

You can make a copy of a sensitivity scenario by clicking on **Copy Scenario** on the tool bar, making it easy to create several scenarios that have variations on the same assumptions.

### Renaming a Scenario

You can change the name of any scenario by using **Rename Scenario** on the tool bar. A window identical to the one used when you first create a scenario will be shown, into which you must enter a unique name. A check will be made on the name to ensure its uniqueness. If the name is not unique, you will be asked to enter another.

### Switching Between Scenarios

To change the assumptions or to calculate the results of an analysis for a Scenario, you can use the drop-down **Scenario** selector on the tool bar. You can then switch between the scenarios and then work with the Setup Tab or the Analysis Results Tab.

If you switch Scenarios while the Analysis Results tab is selected, the results of the analysis for the new selection are calculated and displayed automatically.

## Goal Seeking

Navigation: Home Ribbon>Distribution and Analysis>Goal Seek

You can obtain a residual value for many fields other than Land Value by selecting a field in Definition, or a row in the Cash Flow, and selecting the **Goal Seek** command in the Distribution & Analysis group on the Home tab.

The goal seek function is available in many place in the program: Definition Screen, Capitalised Rent, Unit Sales, Additional Costs, Additional Revenues, and Additional Related Items.

### To run a goal seek

1. Change a **number** in the Definition popup.
2. Select a Target Type.
3. Type number/percentage in **Target Value %.**
4. Click **OK**.

Result: The Goal Seek Status popup appears.

1. Review the **Old Value** and the **New Value to Achieve Target**.

Note: In some cases, ARGUS Developer will be unable to produce a result. Note: A warning displays and the data returns to its original state. If a related percentage fee is the subject of the spot residual calculation, and its value drops below zero, a warning displays and the fee percentage returns to its original state.

1. Click **Accept** to change the value to achieve the goal seek target.

## Goal Seeking Based on Area

Navigation: Project Cash Flow Ribbon>Distribution & Analysis>Goal Seek

Goal seeking can be performed from within the area schedules for capitalised rent or unit sales by clicking on the **Goal Seek** command. The goal seek function can be used to determine build costs, rents, or sales values to fine tune a development.

Goal seeking in an area field forces the program to recalculate the area record and update the cash flow. If the resultant value is either negative or does not achieve the determinants set above, the current area and the cash flow are returned to their original state.

The fields available for goal seeking within the area schedules are shown in the table below:

|  |  |  |
| --- | --- | --- |
| Building | Rent | Sales |
| Gross Area | Net Area | Net Area |
| Build Rate | Annual Rent Rate (MRV rate pf2/pm2 p.a.) | Sales Rate |
| Cost/Unit | Annual Rent/Unit | Sales/Unit |
| Gross Cost | Annual Gross Rent | Gross Sales |
|  | Yield % |  |
|  | Zone A Rate |  |
|  | Leasehold Gearing % |  |
|  | Manual Capital Value |  |

To goal seek in an area field

1. Click into the selected field and either click onto the **Goal Seek** command or press the F6 key.
2. Enter the target type and value and click the **OK** button.

## Goal Seeking Based on Cash Flow

Navigation: Project Cash Flow Ribbon>Distribution & Analysis>Goal Seek

Goal seeking can be performed in the cash flow across a range of different types of item: fixed amounts, percentage-related fees and area-based amounts.

If you choose an area-based row, the program will update the contents of the area record automatically.

If you choose an MRV row, the capitalised rent will be updated automatically.

If you chose a capitalised rent row, the program may adjust either the yield or the MRV rate to arrive at the target value. To specify which variable is recalculated when the capital value is modified, select either Recalculate the Yield or Recalculate the Rent Rate or Market Rental Value on the Receipts tab of Assumptions for Calculation.

**Note:** You will not be able to goal seek on rent free costs. These are calculated from an integral number of months and the goal seek function returns a non-integral value.

Neither will you be able to goal seek on rents when tenants’ rental income streams are generated in the cash flow.

To goal seek on a cash flow row

1. Click into a cell in the selected row, and select the **Goal Seek** command from the Distribution & Analysis group on the Home tab, or right-click within a cell and select **Goal Seek** from the popup menu. Alternatively, you can press the F6 key.
2. Enter the target type and value and click the **OK** button.

## Problems with Goal Seeking

If you select the goal seek command when the program’s residual target mode is set to automatically calculate the land value, a warning will be shown:

To continue with the goal seek using the existing land value:

#### Select Create a Fixed Land Value line with the calculated Land Value option

1. Click the **OK** button

To continue with the goal seek while removing the existing land value:

1. Select the Remove the calculated Land Value option
2. Click the **OK** button

By selecting one of the options and clicking the **OK** button, the program will switch automatically to a Fixed Land Residual mode.

## Analysis Charts

Navigation: Home Ribbon>Preview Reports>Analysis Charts

## Purpose

The analysis charts function is a useful tool that shows you a snapshot of the entire phase/phase group selection in a variety of charts.

To view Analysis Charts

1. Select the **Charts** command from the Distribution & Analysis group on the Home tab.
2. Select the chart type from the **Chart Type** drop-down box.

### Loan Ratio Analysis

This chart shows how much of the loan is actually being drawn down over the period. The top line represents 100% of the available loan money. The other lines represent how much of the loan has been used.

Select/deselect Funding Sources to view/hide how quickly funding sources have been drawn down.

### Project Performance Analysis

This chart shows the IRR and Return on Equity positions across time. The Peak Finance triangle shows the period where the Peak Financing is greatest.

**Note:** that the Return on equity will be meaningful only when Structured Finance is used and a Merged phase view is selected.

### Cost Breakdown

The Cost Breakdown pie chart shows the proportions of each cost type to the total costs, including interest and fees.

Net Operating Income

This chart shows each component of operating income across the project time frame.

Occupied Area Over Time

This chart shows the occupied Gross and Net areas across the project time frame. The data is taken from the tenant leases entered in the capitalised rent screen.

Total Area Over Time

This chart shows the total Gross and Net areas available over the project time frame. The data is taken from the tenant leases entered in the capitalised rent screen.

Occupied and Total Area over Time

This is a composite of the Occupied and total area over time charts.

Running Yield on Cost

This chart shows how the profit on cost performance measure changes across the project time frame. The cumulative costs and revenues are assessed at each month to calculate the running yield.

In the cost breakdown graph, you can change the graph display by using the **Group Items That Are Less Than** control to change the threshold sensitivity.

### Cost/Revenue Analysis

This chart shows individual bars to represent revenues, costs and interest/fees. Two line series are added to show the net cash flow and cumulative net cash Flow positions across time.

If you select the **Revenue against Expenditure** option in the drop-down, additional controls will become available:

Select the appropriate options to add or remove different value series components in the chart.

To preview or print a chart

1. Select the **Preview** or **Print** commands in the Chart Preview group on the Home tab.

To copy the chart to the clipboard

1. Select the **Copy** command in the Chart Preview group on the Home tab.
2. From the drop-down, select:
   * Copy as Bitmap to create a bitmap file.
   * Copy as Windows Metafile to create a file that can be pasted as an editable object in other applications.

## IRR Scenarios

Navigation: Home Ribbon>Distribution & Analysis>IRR Scenarios

The default setting for the calculation of the IRR for any selected phase in ARGUS Developer takes account of all inflows and outflows from the project or phase start date to the project/phase end date.

It is sometimes useful in projects using basic finance (Interest Sets) to analyse the IRR over different time frames within the project/phase time scale.

To define IRR Scenarios, select **IRR Scenarios** from the Project menu.

To add an IRR Scenario

1. Click the **Add New IRR Scenario** command on the tool bar.
2. Enter a Scenario name
3. In the Start Timing box, click the ellipsis to choose a start date.
4. In the End Timing box, click the ellipsis to choose an end date. The IRR is calculated automatically when each date is changed.

To delete an IRR Scenario

1. Click the **Delete IRR Scenario** command on the tool bar.

To display the additional IRRs

1. Open the Preferences window by selecting the **File tab > Preferences**

command.

1. Select the **IRR Scenario Dates** option in the Show Performance Measures group box.

The IRRs and IRR Dates are displayed in the Performance Measures section of the Summary report.

Changing the Start and End Timing

The Start Timing and End Timing for the IRR Scenario can be changed using the Timing window.

Start and End dates can be defined by reference to a development stage, an offset in months from a stage, a specific period or specific date.

# Key Performance Indicators

Navigation: Configuration Ribbon>KPI Dashboard>KPI Template

The Key Performance Indicators (KPI) ‘dashboard’ component of Argus Developer is a replacement for the Results Bar in previous versions. It offers significantly improved functionality, including the ability to create user-defined templates.

The KPI dashboard is part of the Argus Developer workspace and can be selected or hidden from the **Workspace Tabs** command in the Configuration ribbon, as shown:

The controls in the KPI Dashboard group, which appears on the Configuration ribbon, allow the user to select the dashboard to display or to create a new one.

**Name:** Use this drop-down list to select which KPI Dashboard to display. The default dashboard is named Normal.KPIX.

**Dashboard Template:** Click this button to display the main controls for creating and updating user-defined KPI Dashboards. The following image displays the main KPI workspace:

This workspace includes the command ribbon, available KPI Groups to work with, and in the configuration shown, the KPI Dashboard itself at the bottom of the screen. The KPI

Dashboard is a standard Workspace tab; therefore, it can be repositioned in the same manner as other Workspace tabs.

### Editing the Dashboard

Notice that the KPI dashboard itself appears along the bottom of the screen view above. To add an individual item to a dashboard template, simply click and drag it from the list of All KPIs into the KPI Dashboard. To remove an item, click and drag it back into the All KPIs list. Your changes are automatically saved when you click the **Close** command from the ribbon bar.

Configuring the Dashboard

The commands used to configure each dashboard template are described below, proceeding from left to right across the ribbon:

### The Dashboard Templates Group

**Name:** Use this drop-down list to select the dashboard template to display.

**New:** Creates a new, blank KPI template, which is given the name KPILayout1.kpix by default.

**Copy:** Creates a copy of the selected KPI Template.

**Rename:** Allows you to rename the selected KPI Template, which appears in the Name selection window. This is accomplished by a renaming window as shown following:

Delete: Delete the selected KPI Template, which appears in the Name selection window. You will be prompted to confirm this action before the template is deleted.

### The KPI Selection Group

**Sort:** Provides options for Sort by Caption (alphabetical), Sort by Natural Order, or Do Not Sort.

**Group:** Alternately displays all KPIs or just the ones associated with the active group. The image below shows the screen layout with all KPIs displayed:

The Dashboard Layout Group

**Format:** Provides three options for the on-screen size of KPI items: Autofit Width to Short Caption, Autofit Width to Long Caption, and Default Width. Short captions are abbreviated from the long caption format.

**Undo Changes:** Undoes any changes made to the active template. See Also

KPI Budget Dashboard

## Budget KPIs

Navigation: Home Ribbon>Budget KPIs

The Budget KPIs tab displays a comparison of the budgeted KPIs against the latest forecast. When you create a KPI user-defined template, the selected KPIs will appear in the KPI Budget Dashboard. Notice in the image below, the Budget KPIs tab mirrors all the KPIs displayed on the KPI Dashboard.

KPI Budget Dashboard Displays

* Positive and negative KPI variances according to colour selections in the System Configuration.
* Negative KPI variances sign format according to selections in the Cash Flow Preferences.
* Only information for selected Phase or Phase group.
* Template Group with its Original Budget, Revised Budget and Actuals/Forecast KPI values. This allows for simple variance calculations.

**Note:** A positive variance is of benefit to a project while a negative variance is to the detriment of a project.

**Note:** A reverse result is a KPI that has a negative impact on the model even though the result is higher than budgeted.

If you have the Snapshot module, there are four Views available in the Budget ribbon. To Output

1. Right-click in the Workspace area to open a list of print and export options.
2. Select a method to output the KPI Budget Dashboard. You may choose from the following options:
   * Preview KPI Budget Comparison Report
   * Print Budget KPI Comparison Report
   * PDF of Budget KPI Comparison Report
   * Export Budget KPI Comparison to Excel
3. Alternatively, you can access the report from **Preview Reports>Report Group Setup** on the Home ribbon.

Budgeting Terms

* + **Actuals:** Any historical value, only imported from an external financial/accounting system, in ARGUS Developer by cost codes.
  + **Original Budget:** The amount estimated to be the revenue or cost (expense) for developing a project. Values are typically budgeted for an individual project and detailed at the cost code level. The budget period is the length of time for the project (from inception until disposal). The Original Budget is compared to actual results to determine variances from expected performance to allow the budget user to take remedial steps to bring actual results back into line with the Original Budget.
  + **Revised Budget:** Approved revisions that are added/deducted from the Original Budget.
  + **Re-forecasting:** The process a budget user goes through comparing their actuals to the Original (or Revised) budget amounts. Amounts may be adjusted during the remaining months of the budget period to compensate for the variance between the actuals and the budget values.
  + **Forecast:** A forecast is an expected future projection of a project's future revenues, expenses, acquisitions & dispositions and associated KPI’s.
  + **Forecast to Completion:** This is the outstanding forecast (once the actuals have been imported) to the end of the project.
  + **Total to Date:** The sum of all transactions up to the current reporting or closed period.
  + **Locked:** Data held in an original or revised budget snapshot that cannot be changed.
  + **Closed period:** A defined point in time up to where data (or imported actuals) is considered to be locked to form the historic record. Usually defined according to the accounting practice of the user. The time after the closed period is a forecast (future data).
  + **Line item detail:** This is the individual component (cost/revenue/finance) that is used to build up a Project Cash Flow.
  + **Budget Detail:** These are the field names that detail what the budget is monitoring & being compared against.

# Working with Templates

File tab>Control Panel>System Configuration>Folder Locations

You can avoid the repetitive work of creating new projects if you base them on templates designed for the types of project you create most often. A template is an outline for the type of development, its costs, fees, yields, and calculation options. ARGUS Developer is installed with one default template (default.ptl). You can modify and save the template so that it is always available with your own particular settings each time you start a project. By defining templates, you can ensure that all users start with your company default assumptions and fees. You might like to add non-standard fees and costs that are not pre-defined on the Definitions screen, for example income from advertisement hoardings or building regulations fees. Project templates are stored in a location that all users in the system have access to. The default location for templates is the C:\Program Files (x86) or Program Files\ARGUS Software\ARGUS Developer <your version>\Regions\<your region>\Templates folder. The location of these templates may be changed by choosing the File tab>Control Panel>Options>Folder Locations.

## Modify an existing template

1. Open the template by selecting the File tab > Import Developer Project. Alternatively, click **Add Projects** and click on the list of templates available.
2. Click on the name of the template.
3. Change any of the calculation options, fees, areas, yields etc.
4. Save the template using the File tab>Export Data>Export Project Model.
5. Click the **Finish** button.
6. From the Save As File window, browse to the folder where the template was originally saved: Regions\[Your Region]\Templates folder.
7. Name your template with file extension .ptl or select .ptl in the **Save as Type** field.
8. If you use the same name as the existing template, click the **Save** button.
9. A Confirmation window appears. Confirm you want to overwrite the file by clicking the

**Save** button.

## Using an Existing Template

The following are tips for creating your templates either using an existing template or from a project file you have already completed. Ensure you save any changes by using File tab> Export Data (steps 5-8).

### Adding Fees to the Template

If you want to set up your template to include standard fees that are related to the area records for Capitalised Rent or Unit Sales, you must create some blank area records. By doing this, the program will have available some cash flow lines upon which it can set up

the fee relations. Examples of the kinds of fees you might want to set up in this way are Contingencies or Professional fees, both of which rely on Construction cost cash flow lines. Once you start a project using this template, the fee relations will be automatically updated when you add more construction costs to the Capitalised Rent and Unit Sales areas.

1. Open the template.
2. Open the area schedules to base fees upon by using the **Capitalised Rent** or **Unit Sales** commands in the Definition group on the Home tab.
3. Select the **Options>Save Zero Value Items** option.
4. Add new records using the **Add Area** command.
5. Click the **OK** button.
6. Open the Data editor by clicking the ellipsis button in the **Data** field.
7. Select the fee type in the drop-down list of the **Type** field.
8. Open the Selection window to choose the items.

### Assign Cost Codes

If you have the Snapshot module and have setup cost codes, using templates is an ideal method for reducing the repetitive work of assigning cost codes to each row in your model as the same items such as income/revenue, acquisition/construction costs, contingency, taxes, financing tend to be used every time.

See Also

Assign Cost Codes

**Note:** The next time ARGUS Developer is opened, the new templates you have created will be displayed in the template list when hovering over the File tab>Projects>Add Projects.

# Importing and Exporting

## Importing/Exporting Data

Navigate to File tab>Import/Export Click one of the following:

* Import Data
* Export Data
* Clear Invoice Data

### Overview

You can import/export data in several ways. Some of these methods allow you to exchange information with other Developer installations or with other ARGUS products (such as ARGUS Valuation Capitalisation).

Import Data

* [**Import Developer File:**](#_bookmark44)Allows you to import project data from Developer projects on your file system.
* [**Import Portfolio, Project or Cost Code Set:**](#_bookmark46)Allows you to import a portfolio from a file exported from another installation of ARGUS Developer v7.0+.
* **Import Invoice Data:** Allows you to regularly update all your actuals from an external file or direct link to the external source.
* [**Import Invoices from External Data Source:**](#_bookmark49)Allows you to create the link to import data directly from an external source.
* [**Import Area Data:**](#_bookmark51)Allows you to import area, rent and sales data into the area schedule definition editors.

Export Data

* [**Export Data Wizard:**](#_bookmark53)Allows you to export selected items directly to an Excel spreadsheet or into other file formats that can be imported into another Developer installation or into other (third-party) applications including ARGUS Valuation-Capitalisation.
* [**Export Template:**](#_bookmark56)Allows you to export a project as an ARGUS Developer template.
* [**Export in Version XX.X Format**](#_bookmark57)**s:** Allows you to export a project so that it can be later opened in the indicated version. For example, 6.5 format allows the file to be opened in version 6.5
* [**Export to ARGUS Enterprise**](#_bookmark55): Allows you to export a project so that it can be later opened in ARGUS Enterprise.

Clear Invoice Data

* [**Clear Invoice Data:**](#_bookmark58)Allows you to delete all data for the current actuals period.

**Note:** If you require further help and information regarding the structuring of .xml files or direct connection to a database, you should contact your ARGUS sales representative or ARGUS technical support for details of our consultancy services.

The import/export methods are built-in wizards and are capable of transferring large amounts of data.

Importing

You can import portfolio and project data from existing Developer files:

* .wcfx (transferring project data between installations of Developer)
* .adx (transferring portfolio data)
* .wcf
* .xml

Exporting

You can export portfolio, project, project & structured finance cash flows, appraisal summary, and area schedule data in file formats:

* .wcfx: Single project.
* .adx: Portfolio containing multiple projects including cost code data.
* .dvl: ARGUS Valuation Capitalisation.
* .csv: Comma separated values.

**Note:** .xml can also be read by external programs such as Excel.

**Note:** For ARGUS Developer v3+, you can export cash flows in the Developer .xml format. You can also add the imported data to an existing portfolio or use it to create a new portfolio.

## Import Developer File

The import formats that are currently supported by Developer are .wcfx, .wcf, (this is a special .xml file that can be used for transferring portfolio and project data between installations of Developer) and .xml files. Note: .xml can also be read by external programs such as Excel. Also, if you have ARGUS Developer 3 (or later), you will be able to export cash flows in the Developer .xml format. When the data is imported, you will have option to add to an existing portfolio or create a new portfolio.

#### Navigate to File tab>Import/Export>Import Data>Import Existing Developer Projects.

Result: File Browser appears.

1. Choose the file type in the pick list.
2. Browse for the file and click **Open**.
3. Click **Add to an existing portfolio** to add the imported project to the selected portfolio.

Option: Click **Create a new portfolio and add the project:** to create a new portfolio and add imported project to it.

1. Click **Next**.

Result: Select Portfolio Pop-Up appears.

1. Select the portfolio.
2. Click **Import**.

Result: Import Data Status Pop-Up appears.

1. Confirm your project has imported successfully.
2. Click **Close** to close the wizard.

## Create a new portfolio and add project

1. Click **Create a new portfolio and add the project**, then click **Next** to continue.
2. Add a name and unique reference ID for your new portfolio. If you have already created a cost code mapping, you can select one in pick list of the **Mapping** field.
3. Click **Import** to add the project to the newly created portfolio.
4. Confirm your project has imported successfully, then click **Close** to complete this process.

## Import Portfolio, Project or Cost Code Set

#### Navigate to File tab>Import/Export>Import Data>Import Developer Portfolio, Project or Cost Code Set.

Result: Import Parameter Pop-Up appears.

* 1. Click ellipsis to browse to the portfolio file (.adx).
  2. Click **Next**.

Result: Import Data Summary Pop-Up appears.

* 1. Review the import.
  2. Click **Next**.

Result: Import Portfolio Pop-Up appears.

* 1. Select an import method:
     + **Create a new portfolio called:** Enter a name for the new portfolio.
     + **Update an existing portfolio:** Select the portfolio you want to update.
  2. Click **Next**.

Result: Verify Update Pop-Up appears. This displays information about the contents to be imported.

* 1. Click **Next**.

Result: Successful import message appears.

* 1. Click **Finish** to close the wizard.

## Import Invoice Data

To ensure your project is up to date, you must import actual transaction data from your General Ledger or other financial planning software. Developer provides a dedicated wizard that will assist in this process. You can import data as an .xml file or a .csv file. Alternatively, you can connect directly to a database.

1. Navigate to **File tab>Import/Export>Import Data>Import Invoice Data**. Result: to the Update project Source Data Pop-Up appears.

Option: You can elect not to show this page during subsequent Import Actuals Data updates by un-checking **Show this page in future**.

1. Click **Next**.

Result: Select Data Source Pop-Up appears.

1. Click the data source type:
   * **Project Source Data XML Import:** Imports from a standard ARGUS Developer XML project source data file.
   * **Project Source Data CSV Import:** Imports from a file of comma-separated project source data values.
   * **Project Source Database Connection:** Imports from a project source database connection.
2. Click **Next**.

Result: Import Options Pop-Up appears.

1. Click ellipsis in **File Name** to browse for csv or .xml file.
2. Click **Next**.

Result: File Browser appears.

1. Locate and select the file.
2. Click **Open** .
3. Confirm the data sources.
4. Click **Next**.

Result: Target Projects popup appears.

1. Select the project(s) to update.

Note: You can select one or multiple versions of the same project if versions have been created.

Result: Invoice Allocation and Correction popup appears.

1. Review allocated/unallocated phase reference numbers.

Option: Click the toolbar>filter to display only unallocated phase reference numbers.

1. Hover over any Warnings for unallocated phase reference numbers. Result: Displays message **Phase reference doesn't exist in any phase**. Option: Click **Ribbon>Align Phase References**.

Result: The Assign Phase References popup appears.

Note: If there is an issue with the phase reference number, for example it is an error in the source data, you must fixe the error in the source file and re-import the invoice. Alternatively, you can go to Project>Timescale>Phase Reference and type the correct the phase reference number.

1. Type any missing reference numbers in the Reference column and click **OK**. Result: Invoice is not allocated in the State column.
2. Click **Next**.

Result: Import Successful message appears.

1. Click **Finish** to complete this process. If Data Update Unsuccessful

If the data update was unsuccessful, you will see the following **Error** message:

1. Click **Display Log** to identify the data error.
2. Click **Save Log** to save the log. You must return to the source data and correct.
3. Click **Cancel** to close the wizard.

## External Data Sources

**Warning:** For use by advanced database users and administrators only. Please contact your ARGUS Software representative or ARGUS technical support if you require consultancy services for correct implementation.

In addition to importing from xml and csv files, ARGUS Developer also allows source data to be imported from:

* + SQL Server
  + Oracle
  + ODBC
  + OLEDB

Before You Begin

Before importing data from an external data source, you must first create:

* + Import configuration: Defines the source of the data and any options that need to be applied during the import.

Note: Import Configurations are loaded, created, and managed in the Extension Configuration Manager.

## Import Invoice from External Data Source

#### Navigate to File tab>Import/Export>Import Data>Import Invoice from External Data Source.

Result: Extension Configuration Manager appears. Configuration Manager

The Configuration Manager allows you to:

* + Load
  + Edit
  + Create import/export extension profiles.

**Load From File** is useful if ARGUS Software’s technical support or consultancy services sends you new import/export extensions. In this case, load the .axc file, and a new extension will be added to your system.

1. Click Create Configuration.

#### Click Project Source Data Direct Data Import.

Result: Creates a blank configuration and opens the Configuration Wizard.

1. Type/select connection details.

Connection Type

Select a connection type to fetch the external data:

* + OLEDB (Excel or Access)
  + ODBC
  + SQL Server
  + Oracle
  + Oracle ODP

Connection String

1. Enter the connection string for the external data source. Examples of connection strings:

Microsoft Excel 2007 (and later) Provider=Microsoft.ACE.OLEDB.12.0; Data

Source=c:\myFolder\myExcel2007file.xlsx; ExtendedProperties="Excel 12.0 Xml; HDR=YES";

Microsoft Access 2007-2013 (Standard Security)

Provider=Microsoft.ACE.OLEDB.12.0; Data Source=C:\myFolder\myAccess2007file.accdb; Persist Security Info=False; MySQLConnection (.NET)

Data Source=myServerAddress;Database=myDataBase;User ID=myUsername;Password=myPassword;Command Logging=false;

1. Click **Test Connection**.
2. Click **Next** .

Result: Export Data Pop-Up appears.

## Data

1. Select a method for fetching the data from the data source.
2. **Single Table or Query:** Enter name of the single table or query.
3. **Custom Query:** Enter custom query.

Note: Please refer to the documentation provided with the third-party software.

1. Click **Next**.

Option: Click **Previous** to make changes on a previous screen.

1. Select a data source.
2. Click **Test**.
3. Click **Next**.
4. Click **Finish**.
5. Type a name for the new configuration.
6. Click **Close**. Technical Notes
   * Configurations are stored in the ‘ExtensionConfigurations’ sub-folder in the

application folder.

* + Each configuration is stored as a separate XML file that defines the common properties of the configuration (e.g. description, author, extension type etc.) and the extension-specific data that comprises the configuration.
  + Configurations are not inherently bound to a single machine and may be freely copied between machines either by direct file copying or by using the load/save facility in the Configuration Manager (the load / save functionality simply wraps file copy operations for the user’s convenience).
  + Configurations may relate to entities on one machine that are not present on another (ODBC connection be freely copied); it may then fail when used.
  + At present, configurations are only supported by the Source Data Direct Database Import extension; however, other extensions may be provided in the future which support configurations. In the event of such extensions being made available, you can add the relevant libraries to the extensions folder, and the application will integrate them into the product.

## Import Area Data

You can import basic area schedule information such as sales or rental values into a new project or update an existing project by using a .txt file.

1. Open an existing project.

Option: Add a new project from the Project Browser.

1. Navigate to **File tab>Import/Export>Import Data>I**mport Area Data. Result: Import Data popup appears.
2. Click **Next**.

Result: Import Data popup appears.

1. Click **Import File Name** ellipsis to browse and select the .txt file.
2. Select an option for **Update existing definitions with new data**.

Option: Click **Never overwrite existing records** to import as a new record and not replace any existing fields**.**

Option: Click **Overwrite record if match in Heading** to replace all records with matching headings.

Option: Click **Overwrite record if match on Unit Number** to replace all records with matching unit numbers.

1. You can select/deselect the **Ask before replacing each record** checkbox. When selected, this option asks you before replacing each record so that you can choose which records to replace during the import process.
2. Click **Finish** to close the wizard.

## Exporting Data

You can export ARGUS Developer data to a range of applications. The program remembers your last file save location:

* + Microsoft Excel
  + ARGUS Valuation – Capitalisation
  + ARGUS Enterprise
  + Applications that accept CSV files Supported Export Formats:
  + wcfx
  + adx
  + wcf
  + xml
  + aeix

**Note:** .xml can also be read by external programs such as Excel.

**Note:** If you have ARGUS Developer v3+, you can export cash flows in the Developer

.xml format. When the data is imported, you can add them to an existing portfolio or create a new portfolio.

Exporting to Other Products

If you want to use data in ARGUS Developer in another software package, you can use the Export Wizard to:

* + Combine cash flow and floor space data to perform analysis on a property.
  + Use development costs only to model the refurbishment of a property in ARGUS Valuation – Capitalisation.
  + Create a cost file that can be imported into ARGUS Enterprise.

### Export Data Wizard

1. Navigate to **File tab>Import/Export>Export Data>Export Data Wizard**. Result: File Browser appears.
2. Select **What action do you want to perform?** and the Description field displays the action selected.
3. Click **Finish**.

Option: If **Finish** is unavailable, click **Next** to select file format.

1. Select **Create a file of type**.
2. Click **Finish**.
3. Wait while data is exporting.

Export to Microsoft Excel

ARGUS Developer works closely with Excel and defines a set of templates that can be used for presentation and analysis of cash flows and appraisal summaries. When you export to Excel, ARGUS Developer opens Excel and pushes the data into one of several pre-defined templates according to the type of report you want to create.

A simple report contains:

* + Detailed cash flow for each project item
  + VAT value row
  + Interest value row
  + Column totals

When the report is pushed to Excel, ARGUS Developer provides additional formatting for the row and column headings.

To export the cash flow data to Excel

1. Navigate to **File tab>Import/Export>Export Data**.

Result: What action do you want to perform Pop-Up appears.

1. Select **Export Cash Flow**.
2. Click **Next**.
3. Click **Export to Microsoft Excel**.
4. Click **Next**.
5. Select from the following destination options:
   * **Create a simple Cash Flow Report:** Enter the cash flow cycle required (in months) and specify whether hidden row values and group labels are to be exported.

Option: To reduce the number of rows of data in the exported cash flow, uncheck both these options.

* + **Create a new Cash Flow Analysis Report:** Click a template from the list or use the browser to view another drive or directory.

Option: If your project uses Structured Finance, you can export individual cash flow lines that all have the same category (e.g. Construction).

* + **Update an existing Cash Flow Analysis Report:** Click a report from the list or use the browser to view another drive or directory.
  + **Create a Project Data and Finance Cash Flow Workbook**: Click to export project and finance data from the project currently opened. This export is available only for projects using Structured Finance.

1. Click **Finish** to export.

See Also: Enhanced Excel Analytics

Export to ARGUS Enterprise

The export to ARGUS Enterprise produces an .aeix file that contains all the project cost data.

1. Go to File tab>Import/Export>Import Data>Export Data>Export Data>Export to ARGUS Enterprise.

Result: The Export to ARGUS Enterprise popup appears.

1. Select a **detail level for development cost export** option.

Option: Click **Total Development Costs** to sum all the development costs. Option: Click **Grouped Development Costs** to group the development costs. Option: Click **Individual Line Items** to include/exclude specific line item costs. Option: Click **Separate Land Cost** to separate out the land costs. This option is only available if you selected the Total Development Costs option.

1. Click **OK**.
2. Navigate to a file location to save the file and click **Save**. Note: Costs are mapped as capital expenses in ARGUS Enterprise.

Export to ARGUS Valuation - Capitalisation

The export to ARGUS Valuation - Capitalisation produces a .dvl file that contains all the information required to generate a development cash flow that integrates with the investment cash flow. The ARGUS Valuation - Capitalisation cash flow calculates a single purchase price and one capitalisation value for each tenant. Since ARGUS Developer also calculates these values for each project, you are given the option to suppress these values to avoid double-counting.

After the export has been completed, open ARGUS Valuation - Capitalisation and import the export data file (.dvl) to the relevant property.

To export the cash flow to ARGUS Valuation-Capitalisation

1. Navigate to **File tab>Import/Export>Export Data**.
2. Select Export Cash Flow.
3. Click **Next**.

#### Click Export to ARGUS Valuation – Capitalisation.

1. Click **Next**.
2. Click a method upon which to base the exported cash flow:
   * Purchase Price and Fees
   * Capitalisation and Fees
3. Click **Finish** to close the export wizard.

Export to Comma Separated Values file

ARGUS Developer data can be exported to Comma Separated Value files (.CSV), which are opened in:

* + Word processors
  + Spreadsheets
  + Databases
  + Other proprietary packages.

To export the cash flow to CSV format

1. Navigate to **File tab>Import/Export Data>Export Data**
2. Select Export Cash Flow.
3. Click **Next.**
4. Select Export to Comma Separated Values.
5. Click **Next**.
6. Select the cash flow cycle (monthly, quarterly etc.) in the pick list.
7. Click **Finish** to close the export wizard.

Export Templates

If your models always use the same items, the following will facilitate building future models:

* + Assumptions
  + Costs Codes
  + Definitions (construction costs, architects fees, sales, rent, etc) To export the project as a Developer Template

1. Navigate to **File tab>Import/Export> Export Data**.

Result: Save As Pop-Up appears.

1. Type a filename.

Note: By default, the **Save as Type** is set to **Developer Template** (\*.ptlx).

1. Click **Save** to save the template file into the installation sub-folder.

Note: The folder location for the templates can be amended by selecting **Control Panel>Options>Folder Locations**.

1. The template will be available after ARGUS Developer is closed/re-opened and will be displayed in a pick list when selecting **Add a Project** in the Project browser.

Export in Format

Export as file format that can be subsequently imported into your current version.

#### Navigate to File tab> Import/Export>Export Data>Export in Version XX.X Format.

Result: Save As Pop-Up appears.

1. Browse to a location.
2. Type a file name.
3. Select the **Save As Type** file format.
4. Click **Save**.

**Note:** Information that relates to new functions only found in ARGUS Developer v7.0 or higher is not imported into version 6.5.

## Clear Invoice Data

This function permanently deletes transactions imported and any allocations made. It can only be applied if the period is open.

Warning: You may require supervisory access rights to this function. Contact your system administrator.

Warning: If you apply Clear Invoice Data, your actual transactions data will need to be re-imported.

1. Navigate to **File tab>Import/Export> Clear Invoice Data**. Result: Clear Invoice Data popup appears.
2. Select a method for clearing actuals data:
   * Clear all invoices and allocations from all open periods
   * Clear unallocated invoices from all periods Option: To stop this process, click **Cancel**.

**Note:** The Data Checker no longer warns that invoices are unallocated.

# Currency Conversion

## Working with Other Currencies

Navigation: Home Ribbon>Finance>Currency

Convert your project into another currency at any time by selecting the **Currency** command from the Home tab. When you first enter the currency screen, you will see your home currency on the first row of the table. To enable currency conversion, you must add the appropriate currency to the table by entering its name, symbol, and conversion rate. Multiple entries can be made as required.

## To add a new currency conversion

1. Click the **Add Currency** command or select Add Currency from the Currency menu.
2. A new row will appear in the table into which you should enter the name of the currency you wish to use, the symbol used to represent the currency and the conversion rate (Units/Home Rate) to be used.
3. Up to six decimal places may be used.

## To delete a currency conversion

1. Select the currency from the table.
2. Click the **Delete Currency** command or select Delete Currency from the Currency menu.

## To convert the project to a different currency

1. Select the **Home Rate?** option
2. ARGUS Developer will convert all monetary rates and fixed amounts in the project using the Units/Home Rate entered.

Conversion Process

During the conversion, ARGUS Developer works through each of the capitalised rent and sales definitions from the area schedules and converts the rates and unit values. All gross costs and capital values are then recalculated and written to the cash flow. Next, all the fixed values are converted, and the project is recalculated. All reports will now show the converted values with the appropriate currency symbol.

# Data Checker

Navigation: Home Ribbon>Data Checker

The Data Checker is a useful tool that continuously monitors the state of your project as you enter data and change assumptions. It can immediately identify any inconsistencies within the project by automatically running a series of checks each time something changes.

The Data Checker is located on one of the main workspace tabs, usually after the Performance Measures tab.

## Data Status Panel

The Data Status panel on the Status Bar indicates the status of the project data. It changes state to reflect the severity of the data checker’s contents. The following table shows the possible states:

|  |  |
| --- | --- |
| **Status** | **Meaning** |
|  | There are no problems with any data or assumptions |
|  | Hints - no action is required |
|  | Warnings - some action is required |
|  | Errors - action is required |

## Viewing the Data Checker

The Data Checker tab will be automatically focused to the first time any items are added to it – either after opening a project, or when changing data.

To open the Data Checker at any other time, either click on the Data Status panel or click the Data Checker tab.

The Data Checker window is divided into two main parts – the listing of individual data checks and the explanation of the problem.

## Project Data

This part of the Data Checker tale holds information about the current state of the project. It is updated in real time when any data or assumptions are changed.

## Load Notes

This part of the Data Checker table holds information about the state of the file when it was being Loaded. This section can give important information about how a file was

automatically converted from a previous version of Developer. This section is not updated after loading the file.

## Data Checker Contents

* **Phase:** The phase in which the issue has been detected
* **Location:** The area of the program that is affected by the issue (such as Cash Flow or Rent Schedule)
* **Heading:** The heading of the line in the Cash Flow
* **Description:** Description of the issue found See also, Fixing Data Checker Entries.

## Fixing Data Checker Entries

Home Ribbon>Data Checker

You can fix the problem that is the source of an entry in the Data Checker by double- clicking on it to open its editor.

**Example:** If there is an entry related to the timing or distribution of an amount, the program will automatically open the data distribution editor. After correcting the problem in the editor, the data checker entry will be removed.

When the File Load Status is shown in the Data Status panel, the file may have had a discrepancy automatically fixed by ARGUS Developer. These alterations will be documented in the Load Notes section.

Not all entries in the Load Notes section can automatically open an editor – this is because there may be more than one source for the problem, or because the source item has already been removed from the project.

Shortcuts to Fixing Entries

To avoid the need to go into each entry to edit the source data, there are some shortcut methods that you can use to quickly make corrections. To show the following context- sensitive commands, right-click on any entry:

**Edit Source:** This will take you to the part of the program where the issue is located.

**Allow Leases to start After Sale Date:** Allows leases to start after the sale date. This is useful for loading .WCF files created in earlier versions.

**Align Lease Start Date to Capitalisation Date for this Tenant:** Aligns lease start date to the sale date for the highlighted tenant.

**Align Lease Start Date to Capitalisation Date for all Tenants:** Aligns lease start date to the sale date for all tenants that are shown in the data checker.

**Reset Timing on System Timed Item:** Resets timing to default on the highlighted warning for manually timed or distributed lines.

**Reset Timing on ALL System Timed Items:** Resets timing to default on all system timed items for manually timed or distributed lines.

**Remove Load Note:** Deletes highlighted load note.

**Remove All Load Notes:** Deletes all load notes in data checker. See also, Data Checker tab.

## Filters

Navigation: Data Check Ribbon

If you want to temporarily hide some of the entries in the table, use the filters on the tool bar. There are two types of filter – the Event Filter and the Severity Filter.

### Event Filter

The Event Filter allows you to hide specific types of events – such as overridden default relation flags, or manually distributed cash flow lines. It is a useful tool that can be used to filter out hints that have no impact on the project. Select the filter by name in the drop- down list.

Edit

Click this command to edit an existing filter. Deselect line items to exclude them from the filter.

1. Un-check any option whose event you want to remove from the Data Selector
2. Click the **OK** button

New

Click this command to create a new filter.

1. Click the **New** command in the Event Filters group.
2. Enter a unique filter name and click the **OK** button.

Delete

Click this command to delete an existing filter.

1. Click the **Delete** command in the Event Filters group.
2. Click the **OK** button.

Rename

Click this command to give an existing filter a new name.

1. Click the **Rename** command in the Event Filters group.
2. Click the **OK** button.

Although the individual entries are filtered out from view, you will still be given information about them at the bottom of the Data Selector. A line will show information about the number of event types that have been detected but not shown. To view them, edit the Event Filter and check the **Event Type** option.

Severity Filter

The **Severity Filter** buttons allow you to show or hide all the different event types under each category of severity. It is a quick way to hide all events such as warnings so that you can focus on more important events.

The **Severity Filter** push buttons are found in the Severity Filters group on the Data Selector tab. To include all events under a severity category, push the button. It will become highlighted to indicate that it is actively filtering out the events.

# System Configuration

File tab>System Settings>System Configuration

There are a number of options available to change the system configuration. You can access these by selecting **System Configuration** from the Control Panel tab menu.

Options for configuring the following components of the system are available:

* General: Localisation, Templates for New Projects, Show Options
* Format: Currency symbols, thousands separators
* Colours: Custom colours
* Folder Locations: User data folders, templates, reports folder
* Data File Options: Formats for loading/saving, file security
* Cost Codes: Include/exclude line item types in cost code validation
* Map Location: Live Map

## General

Navigation: File tab>Control Panel>System Settings>Options.

## Purpose

The General tab contains options for configuring the locale, specifying a template, or whether to display certain optional prompts in the software.

### Localisation

ARGUS Developer can be customised to work with different languages and with different country-specific calculation models and options.

Language

The language in which Developer presents each of its screens can be selected from the following English variants –British English, North American English and Australian English. When you select a language from the selector, every window changes to show the text and terminology in a localised language version.

Region

The Region selection has several uses in the program. Its purpose is to access all the files and templates that make the program specific to the region in which you prepare your development models. Another important function of the **Region** selection is to determine which calculation model will be used for valuing capitalised rent areas. The **Region** field ensures that any model you prepare in your home region can be opened and valued in another region with the same results.

### Template for New Projects

When you first open the program, or start a new project, Developer can use a project template that contains all the setting for the type of project you work with most often.

Select the default new project template in the drop-down list. This is the default template that is opened when you start a new project by clicking **File tab > New > New Default Project** option.

### Show Options

These various options enable certain options to be enabled or disabled in the program.

Show Value Added Tax

If this is checked, then the Value Added Tax screens are enabled and can be opened by clicking on the **VAT Schedule** button. If this option is not checked, then the **VAT Schedule** button is removed from the button bar and the Value Added Tax screens are not available for use.

Show ITZA Rent Editor

To activate the Retail Zoning (Area ITZA) rent screens this option should be checked. ITZA definition screens may then be opened in the Capitalised Rent form by clicking on the **Retail Zoning** (Area ITZA) button or selecting **Zoning** (Area ITZA) from the Area menu. If this is unchecked, then the ITZA options are disabled.

Show Section 106 and Section 278 Costs

To display the definition of Section 106 and Section 278 costs in the Project Definition Summary, this box must be checked. If this option is unchecked, the Section 106 Costs and Section 278 Costs. If this option is checked, you will be able to type a fixed amount or open the Definition Editor for each one on the Definition Screen. For more information on the Definition Editor, see Editing Costs and Receipts.

Show Municipal Costs

To enable the definition of Municipal Costs in the Definition screen, this box must be checked. If this option is unchecked, the **Municipal Costs** field will not be visible in the Definition screen.

Show Purchaser's Costs

To enable the definition of Purchaser's Costs in the Definition screen, this box must be checked. If this option is unchecked, the **Purchaser's Costs** field will not be visible in the Definition screen.

Show Developer's Profit

If this is checked, the **Developer's Profit** option may be selected from the Definition menu in the tool bar. If this is not checked, **Developer's Profit** is disabled.

Show Definition Editors

To show the Definition tab within the main application area, this check box must be checked. To hide the Definition tab, uncheck this box. When you hide the Definition tab, the inputs of floor areas, rates, fees and costs will be entered using the Cash Flow.

Show Expenditure Assumptions

To show the tab for Expenditure in the Defaults and Assumptions window, check this check box. If this check box is unchecked, the Expenditure tab will not be visible.

Show Receipts Assumptions

To show the tab for Receipts in the Defaults and Assumptions window, check this check box. If this check box is unchecked, the Receipts tab will not be visible.

Show Finance Assumptions

To show the tab for Finance in the Defaults and Assumptions window, check this check box. If this check box is unchecked, the Finance tab will not be visible.

Show Calculation Assumptions

To show the tab for Calculations in the Defaults and Assumptions window, check this check box. If this check box is unchecked, the Calculations tab will not be visible.

Show Interest Rate Assumptions

To show the tab for Interest Sets in the Defaults and Assumptions window, check this check box. If this check box is unchecked, the Interest Sets tab will not be visible.

Show Inflation/Growth Assumptions

To show the tab for Inflation/Growth in the Defaults and Assumptions window, check this check box. If this check box is unchecked, the Inflation/Growth tab will not be visible.

Show Residual Assumptions

To show the tab for Residuals in the Defaults and Assumptions window, check this check box. If this check box is unchecked, the Residuals tab will not be visible.

Show Distribution Assumptions

To show the tab for Distributions in the Defaults and Assumptions window, check this check box. If this check box is unchecked, the Distribution tab will not be visible.

Show Leasehold Valuation Option

To enable the valuation of leasehold interests, defined in the Capitalised Rent screen, this option must be checked. If this option is unchecked, then freehold interests only may be valued.

Show Margin Tax Option

To enable the definition of Margin Tax in the Value Added Tax window and Cash Flow screen, this box must be checked. If this option is unchecked, the **Margin Tax** options will not be visible in the Value Added Tax window or Cash Flow screen. This feature is not used in the UK or Europe.

Show Letting/Rent Review Fees options

If this option is checked, users may specify whether Letting/Rent Review fees are calculated on gross MRV or MRV net of deductions. These options may be selected in the Calculation tab of Assumptions for Calculations. If this box is not checked, these options are hidden.

Show Net Development Yield Option

If this option is checked, then you may specify whether the calculation of the Development Yield is to be net of service charge and deductions and net of ground rent. These options may be defined in the Calculation tab of Assumptions for Calculation. If this box is not checked, these options are hidden.

Show Annual % Finance Fees

To enable the editing of the **% pa Amount** field in the Finance Fees tab (in the Structured Finance screen, when you have the Related fee type selected), this box must be checked. If this option is unchecked, the **% pa Amount** field cannot be edited.

See Also: Finance Fees

Show Undrawn Loan Fees

If this option is checked, undrawn loan fees are displayed on the Finance Fees page of the Structured Finance window.

## Error Reporting

Developer can monitor any unexpected errors that arise when it is running on your computer. To help with detection and resolution to these errors, you can switch on the **Error Reporting** function. When this option is checked, Developer will save some information about the cause of the error to a log file and give you the opportunity to email it to ARGUS Software.

The information in the error report includes a screen shot of the active screen, a trace of the code that was executing when the error occurred and some configuration settings. An edit box is displayed that allows you to enter a short description of what you were doing in the application when the error occurred. Click the **Send Error Report** button to send the report to ARGUS Software.

If you do not want to send the error report to ARGUS Software, click the **Don't Send command** button.

## Format

Navigation: File tab>Control Panel>System Settings>Options>Format

The Format tab allows currency and other settings to be defined for project templates and for the current project listed in the Templates box.

1. Select the current project or template from the **Templates** list provided.
2. Click **Edit** to edit the settings for the selected template or project. Result: This enables the **Format Settings** fields.
3. Make changes to the fields.
4. Click **Save** to save changes or the **Cancel** button to return to the default settings for the selected template.

### Format Settings

Country

Enter the country name for these format settings.

Decimal Symbol

Enter the symbol to be used for indicating decimal values into the Decimal Symbol box.

1000's Grouping Symbol

Enter the symbol that will be used to group the digits in large values into the 1000's Grouping Symbol box.

Currency Symbol

Enter the symbol that identifies a country's currency into the Currency Symbol box.

Position of Currency Symbol

You can specify where the currency symbol appears in relation to a currency value. A placeholder symbol represents the setting that is specified in the Currency Symbol box.

Set for Current Locale

This resets all the settings, with the exception of Currency Symbol, in the Format tab for the selected template to those defined for the current locale.

Note: Settings update to the selected options in the **Formats** tab in the **Region and Language** window from the Control Panel local to your computer.

### Formats

Interest/Growth/Inflation Rate Precision (DP)

You can set the number of decimal places that can be entered in the input fields for interest, and inflation/growth rates. You can choose a precision of two, three, or four decimal places.

## Colours

Navigation: File tab>Control Panel>System Settings>Options>Colours

The colour scheme for the program is selected on the Configuration tab in the main application workspace. However, individual elements can be customised to make them stand out from either the background or from other text or fields. Change these colour elements using the Colours tab.

To change an element colour

1. Click into any colour element under the **Colour** column.
2. Select the drop down to select a predefined colour.
3. Make a selection from the list of standard colours available

To customise an element colour

1. Click into any colour element under the **Colour** column.
2. Click on the ellipsis button. Result: A colour window appears.
3. Make a selection from the table of colours or click Define Custom Colour
4. Use the palette to create the colour you want.
5. Click **Add** to add custom colours.
6. Click **OK**.

## Folder Locations

Navigation: File tab>Control Panel>System Settings>Options>Folder Locations

The Locations tab shows the location of all project data files, templates, and help files. It can be customised by system administrators to make the program conform to your organisation’s IT policies on data storage.

User Data

The default location for saving and loading data files. The User Data folder is common to all users of the system.

User Backup Data

The default location for saving and loading backup data files. When the option to create backups is selected, backup files are created each time a data file is saved. The User Backup Data folder is common to all users of the system.

Systems Templates

The default location for the template data files. The templates control the creation KPI Dashboard, Stamp Duty categories, and projects. They are common to all users of the system.

Note: Any project template files need to be stored in this directory. Excel Templates

The default location for general Excel template files which are used when data is exported into Excel as a simple cash flow. They are common to all users of the system.

Excel Analysis Templates

The default location for Cash Flow Analysis Excel template files. The templates are used when data is exported into Excel to create analysis reports. They are common to all users of the system.

Reports

The location of report template files.

International Files

The location of files used for translations of the program into different languages. Each country has a sub-folder containing the translation dictionaries.

Help Files

All context sensitive help files are held in this folder.

## Cost Codes

Navigation: File tab>Control Panel>System Settings>Options>Cost Codes

The Cost Codes tab allows you to select/deselect line item types to include in the cost code validation.

* Costs
* Revenues
* Construction and Sales Units
* Structured Finance
* Basic Finance

1. Select the check box next to the line items that have to be assigned to a cost code.
2. Deselect the check box next to the line items that do not need to be assigned to a cost code.
3. Click OK to save changes.

## Data File Options

Navigation: File tab>Control Panel>System Settings>Options>Data File Options

The Data File Options tab provides a range of options that allow you to control the type and the content of your data files.

## File Format Options

### Formats for Loading

When you use the File Open dialog to open an ARGUS Developer data file, the dialog will present a dropdown containing a list of preferred file types. You can choose which file types are shown by checking the options under Formats for Loading.

The WCFX file type is always checked by default and this cannot be changed. You can include the existing WCF format, and additionally, an XML type. The XML type allows you to load any data files that have been saved with the XML file extension. The advantage of using the XML file extension is described in Formats for Saving.

### Formats for Saving

When you use the File Save or File Save As dialogs to save an ARGUS Developer data file, the dialog will present a dropdown containing a list of preferred file types. You can choose which file types are shown by checking the options under Formats for Saving.

The WCFX file type is always checked by default and this cannot be changed. You can include the existing WCF file format, but this is not encouraged, unless you are sending the file to another user who does not have Version 7.0+.

The XML format will save the same layout and content as the WCFX file type, but with the file extension of XML. This enables you to double-click on the file to open it in an XML file editor.

### Options for XML-based Files

Such files are largely self-documenting and can be imported into a wide variety of applications, including databases and spreadsheets.

Also in version 7.0+ is the ability to store project results and cash flows alongside other assumptions, floor areas, fees etc.

The file extension for the XML-based data files is WCFX.

This group of options controls how the WCFX and XML file types will be handled during saving and loading.

Compress Developer Format (\*.WCFX) files during Saving Check this check box if you want to compress the data file so that it takes less space on your file system. XML files are large and using this option can make them up to 97% smaller.

Write XML Schema Reference into XML-based files ARGUS Developer uses a document called a Schema to describe the structure and content of a WCFX data file. The Schema is used to check that the structure and content of the data file is correct before it is either loaded or after it has been saved.

Check this check box if you want to save a reference to where the Schema can be found.

Validate files against the XML schema during Loading When a WCFX data file is loaded, Developer can use the Schema to check that the structure and content are correct.

Check this check box to enable this pre-load checking of the data file.

Validate files against the XML schema during Saving When a project is saved in the WCFX format, Developer can automatically check the structure and content of the file against the Schema.

Check this check box is you want Developer to perform this check on the data file.

### Result Content for XML-based Files

Data files saved in WCFX format can hold the results of calculations and cash flows for various combinations of phases and phase groups. The advantage of saving results is that any reports that you might wish to create can be generated directly from the data file itself.

No Results No results will be saved to the data file.

Results from Current Phase Selection Only the results from the Current Phase will be saved.

Results from All Phases Group The results from the All Phases phase group will be saved. This will include results from the Merged Phases and each individual phase within the group.

Results from All Phase Group / Phase Combinations The results from the All Phases group, and all other Phase Groups will be saved, one by one. Each of Merged Phases and individual phases within each phase group will be saved.

This option can generate many result sets, depending on the complexity of the phasing and phase groupings. The data file may be many megabytes in size. Compressing the data file will help to reduce the size.

Results from Current Finance Structure Only the results from the current finance structure will be saved.

Results from ‘All Structures’ Finance Structure The results from the ‘All Active Structures’ finance structure will be saved. This will include results from each of the individual active finance structures as well as the combination of all active finance structures.

### File Security Options

When you are working with project file, it is good practice to save a backup of your existing project. This can be done automatically using the following option.

Create a backup each time a file is saved To automatically create a backup of your existing project as it was when you opened it for editing, check this checkbox.

Save AutoRecover information every To prevent against the rare occasion when the program is unable to continue working and you have spent time editing a project, check this checkbox and enter the interval at which you would like an auto-save to take place.

Note: The auto-save does not overwrite your backup file if you have elected to keep backup files.

Show a desktop alert when saving AutoRecover information When the program is automatically saving your project as you edit it, check this checkbox to show a desktop alert each time it saves.

## Map Location

Navigation: File tab>Control Panel>System Settings>Options

## Purpose

Web services support the Live Map view of the project integrated into the Project tab in the main application workspace. The live map requires an internet URL string to access any map services. The string used to open a map website is entered into the **Map Location URL** field. The live map works by sending each of the fields in the **Location** group in the **Project** tab into a map search engine to show the map. You can control the number of fields that are used in the search by changing the number sequence in parentheses {}. Each number in parentheses indicates a field in the Location group – for example {1} is the **Address Line 1** field, and so on.

## Map Location URL

You can select a map application as the default to assign to projects and click **OK**.

If there are no URLs listed, click **Add** to enter in a URL. You can enter one of the following URLs or a different URL using the similar format.

* **Bing:** https://[www.bing.com/maps/?q={](http://www.bing.com/maps/?q)1},{2},{3},{4},{5},{6},{7},&t=h&z=15&om=0
* **Google:** [http://maps.google.com/?q={](http://maps.google.com/?q)1},{2},{3},{4},{5},{6},{7},&t=h&z=15&om=0

# Changing Settings and Display Preferences

Navigation: File tab>Control Panel>Preferences

In the Preference window, you can change default settings to customise the way in which ARGUS Developer works. For example, you may want to:

* Hide Key Performance Indicators on the Summary report.
* Change the units of measurement.
* Change the font settings.

The Preferences window is divided into three tabs: **General**, **Cash Flow**, and **Summary**. Settings are determined by selecting or clearing the options or by typing or selecting new information. The new settings take effect when you close the window by clicking the **OK** button and remain in effect until you change them again.

## Preferences Window

To change the default settings:

1. Click the **File tab** in the upper-left corner of the main window.
2. Select the **Control Panel** tab.
3. Click **Preferences** under System Settings.

Alternatively: In the Cash Flow and Summary reports, you can right-click and select the Preferences menu.

See Also

General Preferences Cash Flow Preferences Summary Preferences

## Index

Acquisition Costs, 277

Acquisition Price, 277 Fixed Acquisition Price, 278

Acquisition Price, 277

Adding Scenarios, 410

Additional Data, 294

Additional Options, 403

Allocating Infrastructure Costs, 284 Architect Fees, 289

Area-Based Goal Seeking, 412 Arrangement Fee, 294

Basic Finance, 314

Calculation Assumptions, 91 Capitalised Rent & Sales, 199

Annual Rent, 199

Construction Costs, 199

Breakdown, 199

Financial, 199

Editing the ITZA Schedule, 199 ITZA Definition, 199

Lease Events, 199

Lease Options, 199

Leasehold Properties, 199 Leasing Commission Profiles, 199 Master Ground Lease, 199 Options, 243

Name Area Tabs, 243 Rent Free Methods, 243

Save Zero Value Items, 243 Percentage Rent, 199

Rent - Financial, 199

Rent Additions / Costs, 199 Rent Capitalisation, 199

Retail Units, 199

Stepped Rents, 199

Unit and Floor Space, 199 Cash Flow

Add Row, 304

Cell Properties, 304 Clear Data Cells, 304 Column Options, 324 Copy and Paste, 304 Cut and Paste, 304 Delete Row, 304

Edit Source, 304

Fill, 304

Grouping Rows, 324

Basic, 324

Custom, 324

Heading, 304

Hidden Rows, 304 Interest and Inflation, 304 Lock / Unlock, 304 Options, 304

Row Properties, 304

Sign, 304

Sorting, 324

Status Bar, 302

Summary Options, 324

Tagging Rows, 304

View Cycles, 322

Cash Flow Context tab, 304 Cash Flow Grid, 302

Cash Flow Search, 323 CD Manager Fees, 289

Changing How Stages are Linked, 127

Changing Stage Duration, 127 Changing Stage Start Date, 127 Chart Report, 136

Clearing Data Checker Entries, 439 Colors, 447

Construction Costs, 282

Control Panel, 63

Copying Scenarios, 410 Costs and Receipts, 257

Additional Financial Data, 258 Calculation Basis, 262

Calculation Type, 262 Cash Flow View, 269 Cost Types, 258

Custom Curve Distribution, 269 Custom Label Descriptions, 275 Data Fields, 257

Definition, 257

Definition Data Editors, 257 Distribution, 269

End Date, 269

Entering Notes, 258 Interest and Inflation, 258 Sales Tax, 258

Specifying Calculation Methods, 258

Start Date, 269

Creating Phases, 121

Creating Sensitivity Analysis, 399 Creating Use Classes, 255 Custom Label Descriptions, 275 Data Checker, 438

Data Status Panel, 438 Decimal Symbol, 446

Deleting Phases, 122

Deleting Scenarios, 410 Deleting Use Classes, 255 Dependencies, 129

Developer's Profit, 300 Development Management Fee, 294 Distribution Assumptions, 91

Engineering Fees, 289

Excel Analytics, 376

Expenditure Assumptions, 91

Filters, 440

Finance Assumptions, 91 Fixed Acquisition Price, 277 Fixed Phase Start Date, 130 Fixed Stage Start Date, 131

Fixing Data Checker Entries, 439 General Preferences, 71

Goal Seek Problems, 413 Grouping Phases, 124

Growth Sets, 91

Help, 61

Importing Data, 37, 425

Inflation Sets, 91

Infrastructure Costs, 284

Infrastructure Phases, 284

Interest Sets, 91

Invalid Timing, 135

IRR Scenarios, 416

Key Performance Indicators, 405, 418

Legal Fees, 292

Letting Agent Fees, 290 Letting Fees, 290

Linked Analysis, 405

Linking Phases, 130

Linking Stages, 131

Load Notes, 438

Logo, 366

Marketing Costs, 290

Merging Phases, 123

Moving Phases, 123

New Project, 12

New Project Checklist, 12

Operated Assets, 247

Calculation of Monthly Amounts, 247

Capitalisation Method, 247

Department Categories, 247

Occupancy Tables, 247 Operating Revenues and

Expenses, 247

Rate Tables, 247

Other Acquisition Costs, 277 Other Professional Fees, 289 Percent of Development Cost, 294 Performance Measures, 357 Phase Data Type, 120

Phase Dependencies, 130

Phase Name, 120 Phase Start Date, 120 Phases, 121

Creating, 121

Deleting, 122

Dependencies with Stages, 132 Grouping, 124

Merging, 123

Moving, 123

Pre-Check, 404

Preferences, 455

General, 71

Summary, 83

Printing a Sensitivity Analysis, 405 Professional Fees, 289

Project Management Fees, 289 Project Start Date, 120 Purchaser's Costs, 291

Quick Entry Area Schedule, 232 Copying Values, Area Schedule,

232

Filling a Series, 232 Quick Entry Table, 232 Quick Entry Toolbar, 232

Receipts Assumptions, 91

Renaming Scenarios, 410

Report Footers, 366

Report Headers, 366

Report Options, 366

Footers, 366

Headers, 366

Report Setup, 361

Reset Linking between all Stages, 127

Residential Sales, 222

Graph View in the Sales Schedules, 222

Multi-Unit Sales, 222 Sales Contract Editor, 222 Single Unit Sales, 222

Residual Assumptions, 91 Running a Sensitivity Analysis, 405 Sales Additions/Costs, 299

Sales Agent Fees, 292 Sales Fees, 217, 292

Sensitivity Analysis KPIs, 405 Sensitivity Analysis Pre-Check, 404 Severity Filter, 442

Site Area, 277

Stage Dependencies, 131

Stage Duration, 126

Stage Name, 126 Stage Start Date, 126 Stages, 126

Changing Duration, 127

Changing Linking, 127 Dependencies with Phases, 132 Reset Linking, 127

Stamp Duty, 277

Structured Finance, 137

Structured Finance Cash Flow, 321

Summary / Pro Forma, 356 Summary Preferences, 83

Surveyor Fees, 289

Switching between Scenarios, 410 System Configuration, 443

Template, 423

Thousands Groupings, 446 Timescale & Phasing

Chart Report, 136

Development Stages, 126

Validation, 135

Timescale and Phasing Report, 136 Unit Sales, 217

Deposits, 217

Pre-Sales, 217

Sales, 217

Sales Additions, 217

Sales Costs, 217

Use Classes, 255

Validation, 135

Value Added Tax, 354

Viewing a Sensitivity Analysis, 405 Viewing the Data Checker, 438 Welcome, 11

Working with Templates, 423