Retain Security Manager User Guide

Retain International
33 Beaufort Court
Admirals Way
London
E14 9XL
United Kingdom

1 646 688 4496 (USA)
0845 458 8660 (UK)
+44 20 7538 4774 (World)

info@retaininternational.com
www.retaininternational.com

Table of Contents

1 Introduction

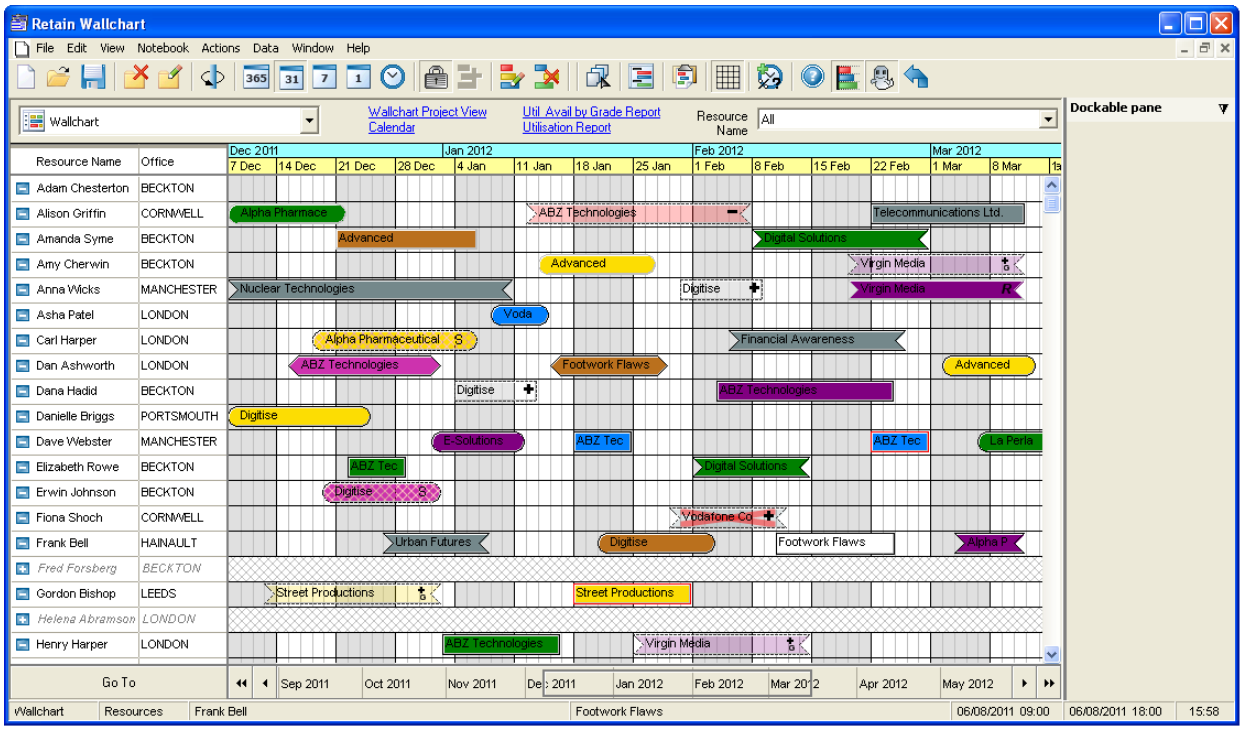
Retain Security Manager User Guide

Corporate Edition

www.retaininternational.com

1.1 About Retain

Retain Wallchart is a flexible planning tool for viewing and managing staff and job allocations through a user friendly graphical interface. It has been designed to resemble the manual 'wallchart' booking system but is much more versatile than any manual booking system:



1.2 About Retain Security Manager

Retain Security Manager is an administration tool used for initial setup as well as subsequent administration of Retain.

Retain Security Manager is used to define and maintain:

- user roles
- user security
- report filter groups
- colour scheme values
- shape scheme values
- table/field properties
- database settings
- run scripts against the database
- charge rates and charge bands
- diary
- manage resources' skills (if you have the Corporate with Skills Edition)

1.3 Where To Get Support

If you have any issues with Retain which you are unable to resolve using this user guide or through your local support contacts, please contact your Support Service Provider.

1.4 Installing Retain Security Manager

This guide assumes that Retain has already been installed on your computer or network drive and is available to you. If it is not, either consult your local support contacts or refer to the Technical Implementation Guide for instructions on installing Retain.

If you are involved in the initial set-up using Retain Security Manager, refer to the General Principles chapter before you start.

Note that once installed, Retain Security Manager will be enabled for full functional access (for a limited number of attempts) to allow you to set-up required access permissions.

2 General principles

2.1 Introduction

This chapter provides information that will allow you to prepare for the installation of Retain Security.

Thinking it through section gives some ideas on how to approach security options and achieve a clear, consistent and simple set of conventions.

Preparing your data section offers advice on how to prepare your data.

2.2 Thinking It Through

Before you start, it is important to think carefully how you would like Retain Security Manager options to be set up. Starting in an ad-hoc fashion might result in confusing roles, users and defaults. This section offers some ideas on user security settings.

Firstly, you might want to make the role names reflect your longer term aspirations. For example, you may have a super administrator and several sub-group administrators. These could be grouped by geography, subject, department, etc. There will also be function-based roles, such as 'View', 'Edit own line' and so on. Make sure you develop an intuitive naming convention which will make the system easy to maintain.

Also, consider using several sub-groups to define a group rather than creating many different unique roles. For instance, you could have several levels of user in an office. They could be identified by combinations of the office role, view role, edit own line role, and administrator role. Thus, there would only be one role unique to the office; while the other three roles would be used generally in many other groups, including other office groups.

A clear naming convention is needed for the role names for functional access as well.

With regards to users, you do not need to specify every user as an individual. Many will simply use the Default User characteristics.

Note that user names must be unique therefore your naming convention should have a strategy for coping with identical names.

The following section provides some ideas on how to approach the database tables, fields, their defaults and aliases.

2.3 Preparing Your Data

Once you have decided on how you want to set up Retain Security Manager, you should prepare your data.

Before using Retain on a daily basis, it is useful to set up permanent information, such as staff names and names of recurring tasks or assignments, so that this information is available when you need to use it.

You should also think through the way in which you are going to structure your data files and prepare the raw data. This process is likely to include:

- Defining conventions for the usage of various fields in the 'Resource' and 'Job' tables.
- Preparing a schedule of staff and equipment details to add to the 'Resource' table.
- Preparing a schedule of recurring or forthcoming assignments to add to the 'Job' table.
- Preparing a schedule of generic sub-tasks to add to the 'Components' table.

You may prefer to implement Retain using a blank database, allowing users to add records when needed. However, dealing with the set-up of data files as an 'up-front' exercise has several advantages:

- Conventions for usage of the different fields can be firmly established during the set-up and are therefore less likely to be ignored.
- Data can be collated and checked centrally from other sources, such as staff and client systems, therefore reducing the risk of errors.
- There may be scope to transfer this data automatically from other systems.
- People who are responsible for planning can see the available resources and assignments that need to be planned as soon as Retain is implemented.

3 Starting Retain Security Manager

3.1 Overview

Retain Security Manager is used for initial set-up and the subsequent administration of Retain users and data. However, the main purpose of this application is to create users and set up their levels of access to Retain and to Retain Security Manager itself.

To start Retain Security Manager, see Getting Started section. To learn how to set up users and assign them roles see Users security settings section.

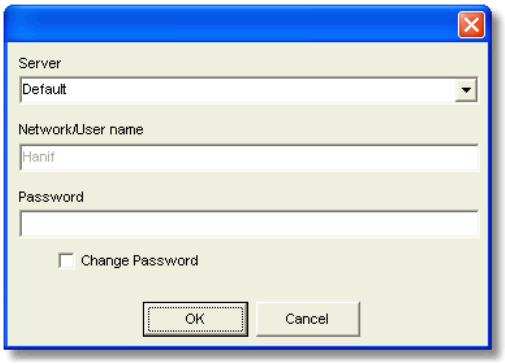
For other settings see Licence settings and Database settings sections.

Notes:

- When you make changes in Retain Security Manager, save them and then select 'Structure-> Effect changes' from the menu or stop and re-start Retain Server for the changes to make effect within Retain.
- If there is more than one person who has access to Retain Security Manager, changes might be made simultaneously. You should therefore use the 'Refresh' option from the right-click menu for a menu item to make sure you see the most recent changes.
- To quickly locate an item within a list, go to the list and start typing the required name. The relevant item will be highlighted.

3.2 Getting Started

You should find Retain Security Manager in the main Retain group using the Start Menu. You may be prompted with a logon box:



Server

It is the Retain Server you are connecting to, which should be left as 'Default' since initial installation. However, if you have more than one server set up you can choose an alternative from the drop-down list.

Network/User name

It should be consistent with the user's Windows logon. If you are opening Retain Security Manager for the first time it will have a default value (e.g. Administrator).

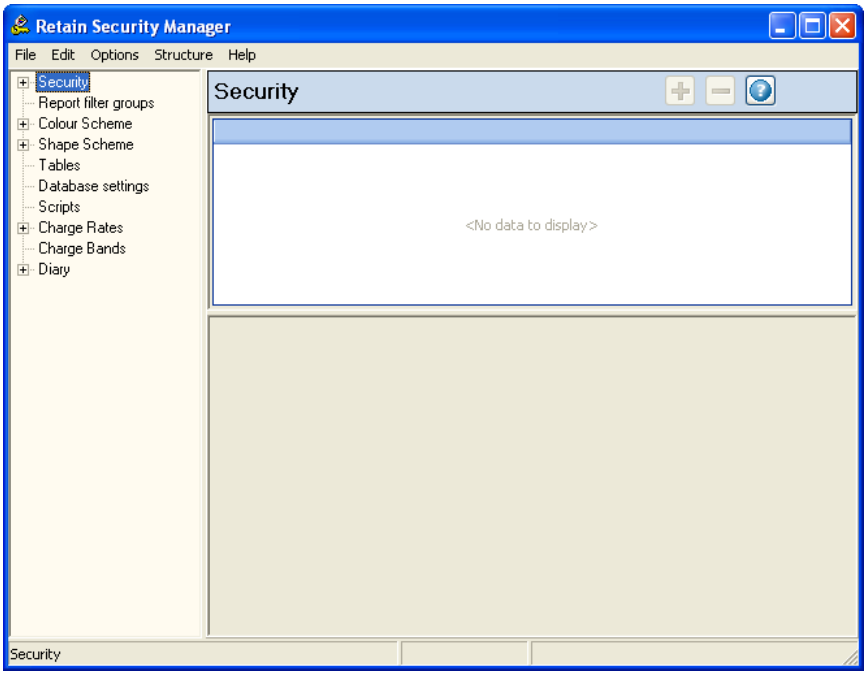
Password

It should always be left blank unless for special configuration set-ups. Click on 'OK' to open Retain Security

Manager.

3.3 Retain Security Manager Interface

Once run, Retain Security Manager will open:



You can now manage:

- user roles
- user security
- report filter groups
- colour scheme values
- shape scheme values
- table/field properties
- database settings
- run scripts against the database
- charge rates and charge bands
- diary
- manage resources' skills (if you have the Corporate with Skills Edition)

3.4 Saving Changes and Exiting

If you make any changes in Retain Security Manager, you can save the changes by clicking on Save Changes button. Use the Undo Changes button to reverse your last change.

If you want the changes to be applied without restarting Retain Server, select 'Structure-> Effect changes' from the menu.

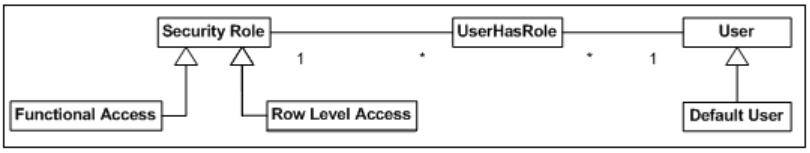
To exit Retain Security Manager, choose 'File-> Exit' from the menu, or click on the button on the top right corner. Alternatively, press ALT+F4.

Note: If you exit without saving the changes you have made, Retain Security Manager will automatically save these changes for you.

4 Security Model

Retain's security model determines which functionality is available to the user and against which data this functionality can be applied.

The following diagram illustrates the building blocks of the security model and how they are interrelated:



To understand the security model you need to understand the relationship between users and security roles. A user is associated with a number of security roles. Each security role grants and restricts functionality and/or access to data. The combination of different roles associated with a user is what determines the effective privileges granted while running the software.

There following security access types are available:

- Row Level Access roles determine which records in the database can be viewed and/or edited by a certain user.
- Functional Access roles determine which functionalities of a certain Retain software are available to the user. For instance, functional access for Retain Web can specify a certain section of the web application to be hidden. An example of functional access for Retain Wallchart is a user being allowed to either edit or only view the available data.

Each security access is assigned a name and can be linked to users.

- Users. A user represents a security profile under which an individual can connect to the Retain suite of applications. A user can also represent a point of authentication, as in representing the credentials used to access the Retain software.
- The Default User should always be present in the security model. As the name suggests, this user provides a default set of privileges an individual is granted when accessing the Retain software suite. Every security role which is associated to the default user is also granted to any other user in the security model. In a typical Retain deployment the default user is granted read only access to the data and viewer only functional capabilities which usually corresponds to what the majority of employees are allowed to do with the Retain software suite.

The following sections will describe each of the security roles in more detail and show how they can be managed using the Retain Security Manager.

4.1 Row Level Access

Row Level Access roles define the level of access a user has to the records in a particular table. A role consists of the following:

- Table - the table in which the field resides.
- Link Table - the table in which the conditional field resides.
- Field - the field that the condition is applied to.
- Value - the field value on which the condition is set. Use '*' to imply any value.

- Security Level - the access rights that will be applied (select as many as necessary):

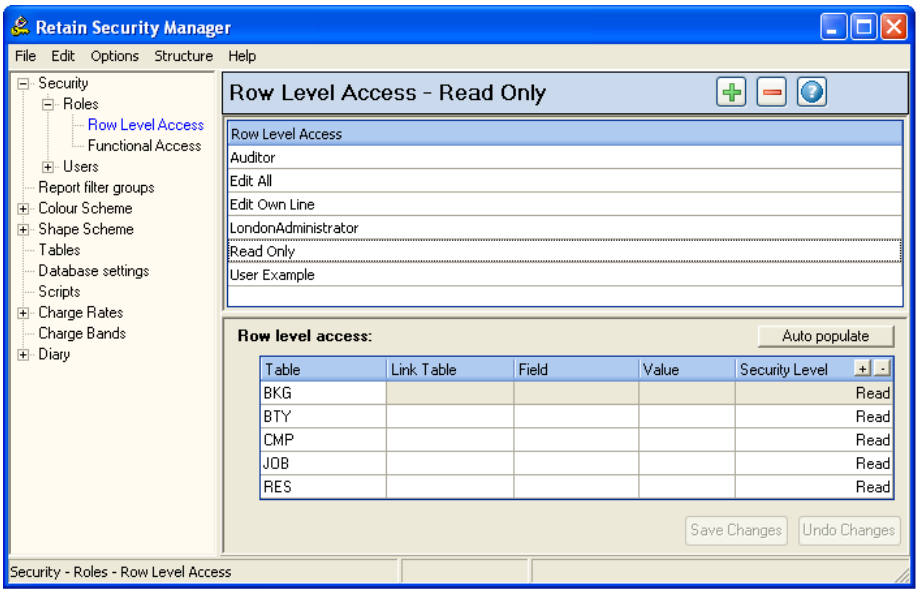
  Read: The user is allowed to view the information contained in the database

  Insert: The user can add new records to the database

  Update: The user can modify existing records in the database

  Delete: The user can delete records from the database

  None selected: The records are hidden from the user



The row level access roles provided by default are:

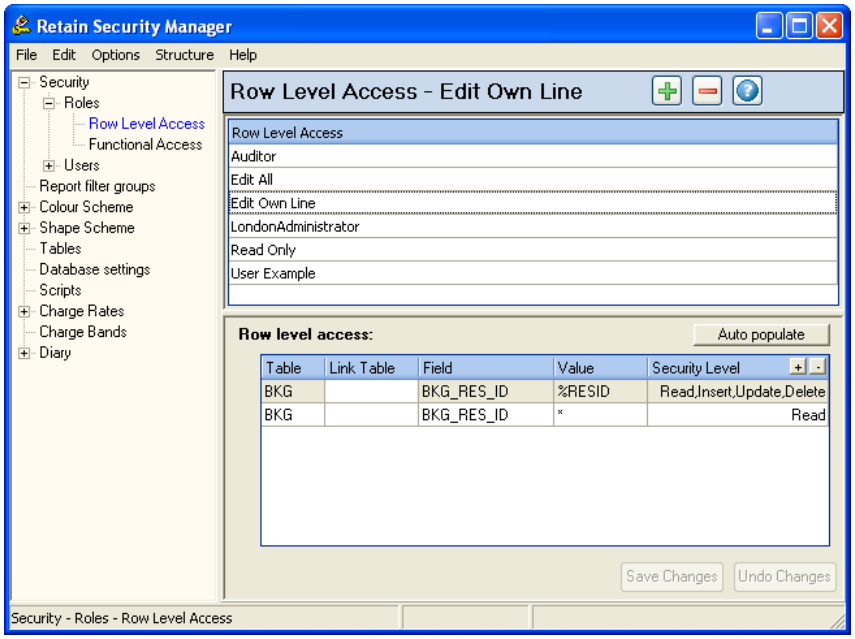
- **Edit All** - the user has full access to all the main tables;
- **Edit Own Line** - the user can edit his/her own bookings and related details;
- **Read Only** - the user can view the information only.

Note: When multiple row level access roles are assigned to the same user, the higher level of access will override the lower one.

To create a new role:

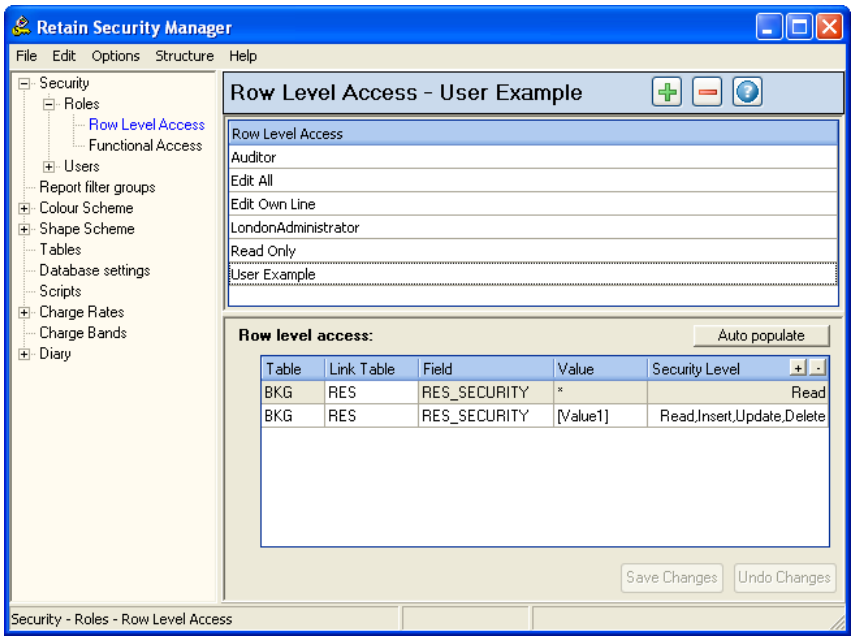
1. Right-click on 'Row Level Access' in the left pane and choose 'Add' or click on the button.
2. Click on the button to add a condition line for the role. You can delete it by clicking on the button.
3. Name the new role (e.g. 'User Example').
4. Define the role as necessary and click on the Save Changes button.

For example, for users who will be allowed to edit their own bookings but only view all the other bookings you can create the 'Edit Own Line' role:



%RESID is used to match the ID of the resource with the ID of the booking so that only the user with a matching ID can have full access to his/her bookings.

The 'User Example' role, illustrated below, is a template for a role which defines how users with different security settings will access booking information. You can change [Value1] to denote administrator users who will have full access rights. All the other users will be able to view information only:



The security rules which can be defined for row level access are evaluated twice when modifying an existing record. First evaluation is done when a user requests to open a dialog to edit the record - if the conditions are not met, the user will not be able to change the fields. A second evaluation happens when a user changes some fields in a record. If the altered fields cause the row level security to return false, an error message will appear stating that the security rules have been violated.

Using the above example, if you edit a resource whose security field is 'Value1' and change it to 'Value2', you will get an error message because you are not granted the right to edit resources whose security field equals to 'Value2'.

Note that security access can be based on any field in the database with any value. You can determine what data users actually see by the tables and associated field values you specify.

See the following section for more examples.

If you want to **create a new role that is similar to/based on an existing one**, you can use the Auto Populate function:

1. Click on the Auto populate button in the right pane.
2. Select a required role from the pop-up list.
3. Click on the 'OK' button. This will populate all the access rights of the selected role. You can then edit it as necessary.

Examples

Row Level Access roles determine which records in the database can be viewed and/or edited by the user.

For example, if your company has offices in different locations, you might want to allow the managers from a certain office to be able to edit bookings and resources from their own office only. So, if you want manager working in the London office to be able to edit bookings and resources from the London office but only view bookings and resources from other offices, you can assigned them the 'London Administrator' role:

1. Create a new role by right-clicking on 'Row Level Access' in the left pane and choosing 'Add' or clicking on the button.
2. Click on the + button to add a condition line for the role. You can delete it by clicking on the - button.
3. Name the new role (e.g. 'London Administrator').
4. Define the role:

For the Bookings (BKG) table

In the 'Table' section choose the BKG table.

In the 'Link Table' section choose the RES table.

In the 'Field' section select the RES_OFFICE field.

In the 'Value' section enter * to indicate 'any' office and set the 'Security Level' to *Read*.

Create another line with the same Table, Link Table and Field as above but in the 'Value' section type in 'London' and set the 'Security Level' to full access (by ticking all the available boxes).

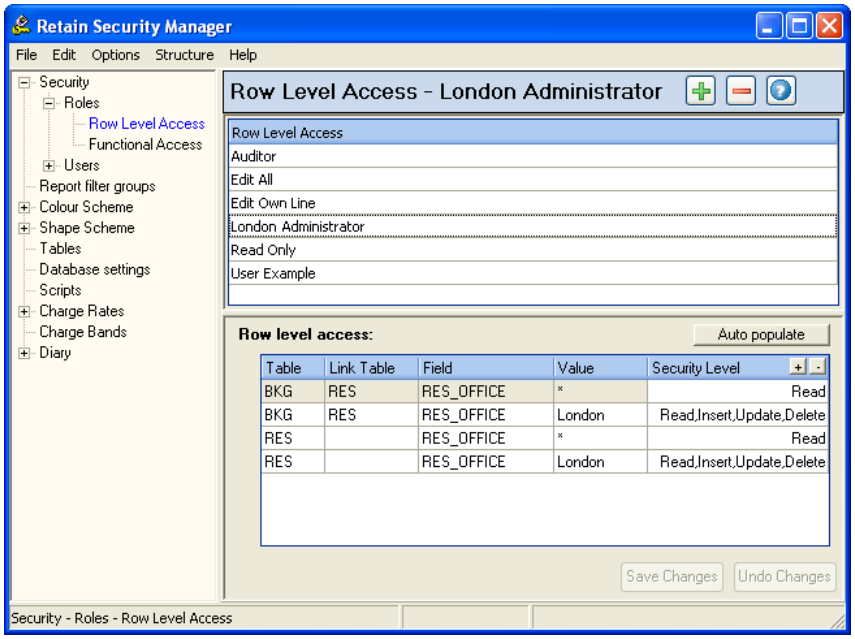
For the Resource (RES) table

In the 'Table' section choose the RES table (no 'Link Table' value is needed).

In the 'Field' section select the RES_OFFICE field.

In the 'Value' section enter * to indicate 'any' office and set the 'Security Level' to *Read*.

Create another line with the same Table, Link Table and Field as above but in the 'Value' section type in 'London' and set the 'Security Level' to full access (by ticking all the available boxes):



5. Click on the Save Changes button.

You can restrict the user access even more by allowing him/her to edit bookings and resources from a certain department only.

For example, if you want an auditor to edit bookings and resources from the Audit department:

1. Create a new role by right-clicking on 'Row Level Access' in the left pane and choosing 'Add' or clicking on the button.
2. Click on the + button to add a condition line for the role. You can delete it by clicking on the - button.
3. Name the new role (e.g. 'Auditor').
4. Define the role:

For the Bookings (BKG) table

In the 'Table' section choose the BKG table.

In the 'Link Table' section choose the RES table.

In the 'Field' section select the Department field.

In the 'Value' section enter * to indicate 'any' department and set the Security Level to *Read*.

Create another line with the same Table, Link Table and Field as above but in the 'Value' section type in 'Audit' and set the 'Security Level' to full access (by ticking all the available boxes).

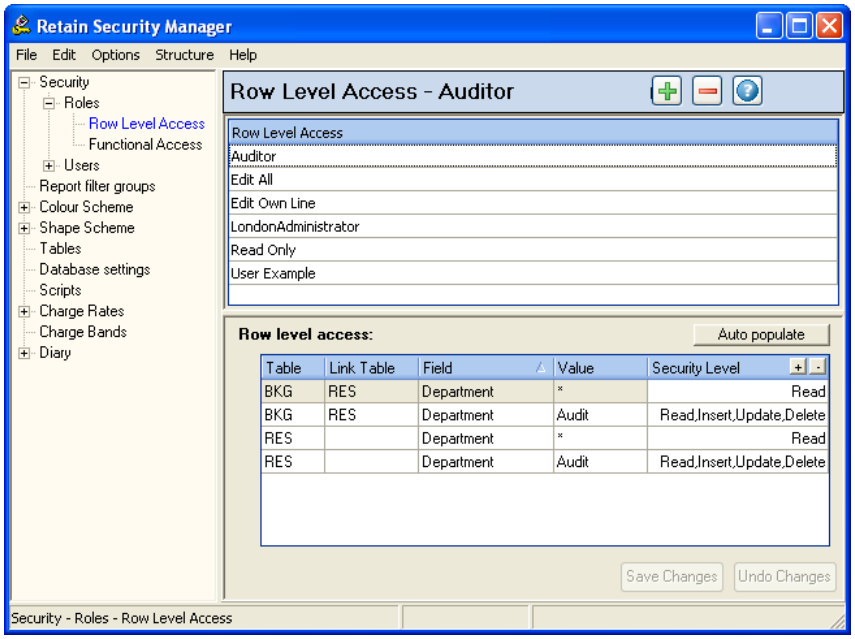
Define the role for the Resource (RES) table

In the 'Table' section choose the RES table (no 'Link Table' value is needed).

In the 'Field' section select the Department field.

In the 'Value' section enter * to indicate 'any' department and set the 'Security Level' to *Read*.

Create another line with the same Table, Link Table and Field as above but in the 'Value' section type in 'Audit' and set the Security Level to full access (by ticking all the available boxes):



6. Click on the Save Changes button.

AND, OR (Closed) and OR (Open) Security

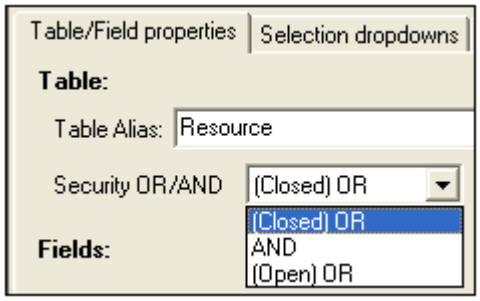
A user can be linked to multiple row level access profiles. The Retain security model offers three different ways of combining row level access for each table in the database.

- **Open OR** is probably the most common way of thinking about the combination of rules.
Given a record, all the rights granted from the different rules are added together. For instance, if one row level profile is based on the security field and grants you *insert* and *update* rights while another is based on the office field and grants you *read* access, the complete set of access rights *(insert, update* and *read)* will be available.

- **Closed OR** is the default value and is similar to the **open OR** security.
The main difference is that when updating an existing record, if a field in one of the row level profiles was not granting *edit* rights, that field cannot be changed to another value whereas other fields in the record can.

- **AND** is the most infrequently used condition.
The set of rights granted on a record is the intersection of the sets of rights granted by a single profile. For example, if any of the row level profiles grants no rights on a specific record while another profile grants all possible rights, the user who has both profiles associated to it will have no access to the record. If one record has *read* access and another one *read* and *insert*, the resulting rights on that record will be *read* only.

To define AND/OR security for a given table, go to the 'Tables' section in Retain Security Manager and select the required table. The AND/OR conditions can be defined using the drop down menu in the 'Table/ Field' properties tab:



Note that you can have different AND/OR conditions for different tables.

Examples

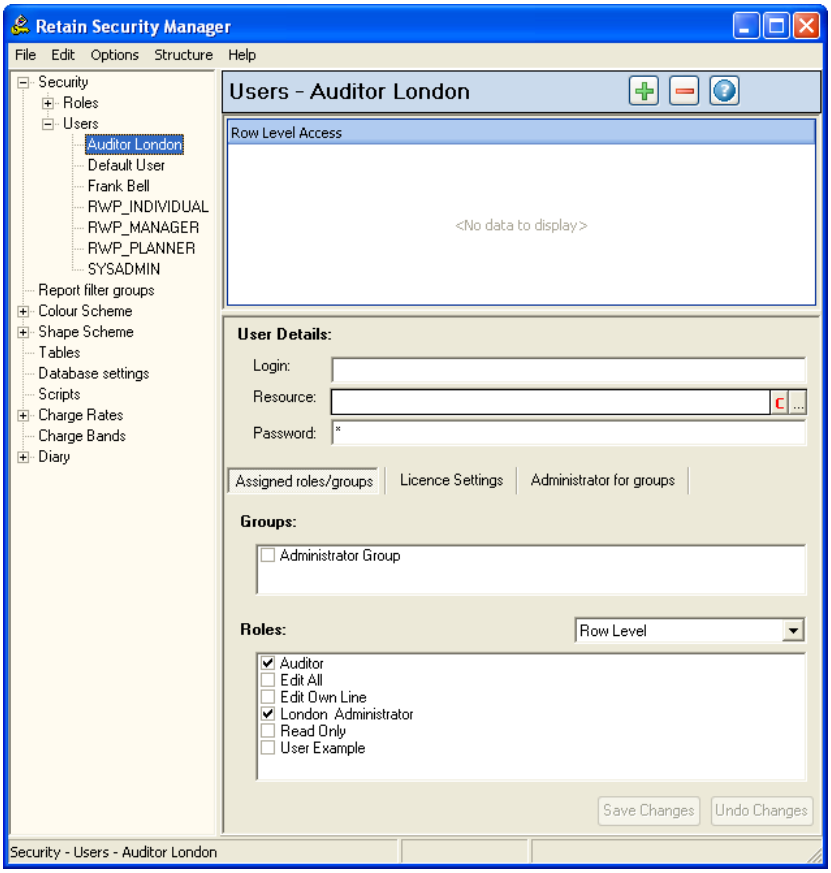
For example, you might want to combine the roles described in the previous example, i.e. a role allowing the user to edit bookings and resources in the London office only and a role allowing the user to edit bookings and resources in the the Audit department only.

To link several row level access roles to a user:

1. Right-click on 'Users' in the left pane and choose 'Add' or click on the button.

2. Name the new user (e.g. 'Auditor London').

3. In the Roles list tick the 'Auditor' and 'London Administrator' roles:



Open OR
Using the Open OR security with 'Auditor' and 'London Administrator' roles will enable the user to edit

bookings and resources in London office as well as Audit department. Also, he/she will be able to view the data from other offices and departments. In short, all the rights granted to both of these roles will be added together even if the conditions for one of the roles are not satisfied.

Closed OR
This is set as the default value. Using the Closed OR security with the 'Auditor' and 'London Administrator' roles, the two fields with edit rights are office and department when they are equal to 'London' and 'Audit', respectively. If these conditions are not met, the office and department fields can not be edited but other fields in the booking and resource tables can.

AND
This is the most restrictive type of security. The user with 'Auditor' and 'London Administrator' roles with AND security will not be able to edit any bookings or resources if one of the conditions is not met. In other words, if department is 'Audit' but office is not 'London' (or office is 'London' but department is not 'Audit'), the user will not be able to edit bookings or resources.

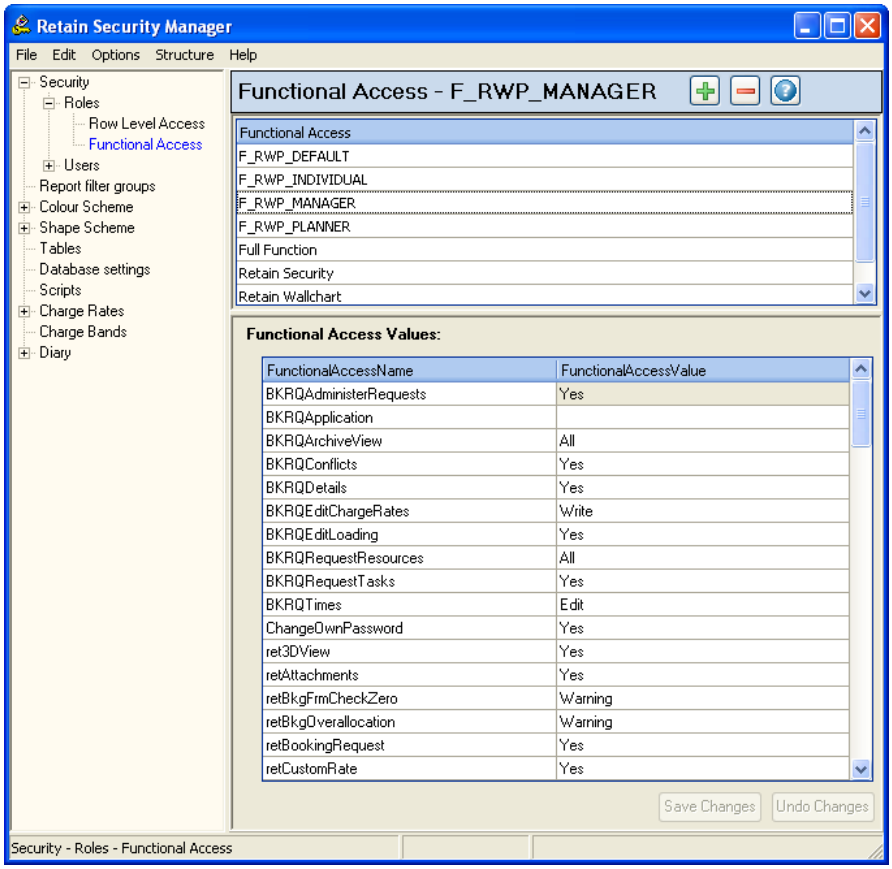
4.2 Functional Access

Functional Access defines the functionality that users can access. Each Retain application defines its own functional access values.

When multiple functional access roles are assigned to the same user, the higher level of access will override the lower one.

To illustrate, the functional access value webScheduleEdit has three possible values: None, EditOwn and EditAll. If the user is linked to two functional access profiles, one having 'None' and the other 'EditOwn', he/she will have the 'EditOwn' rights.

Functional access profiles are assigned and edited using Retain Security Manager:



The prefix used in the functional access name indicates which application the role applies to:

- BKRQ Retain Booking Requests
- ret Retain Wallchart
- rrp Retain Enterprise Reports
- rsm Retain Security Manager
- Skills Retain Skills
- time Retain Time
- web Retain Web

The various permissions, or functional access values, are generally obvious from the title of the function and the drop-down access value list. For example, *retGhostBookings* specifies whether the user can edit ghost bookings (Edit), only view them (View) or not able to access this functionality at all (None).

You can define your own functional access roles or edit the default ones. For instance, you can create a 'Full Function' role allowing access to all of the available functionality. See the following section for more examples.

Note that depending on the edition you are using, some of functional access values listed below may not be available to you.

Booking Requests Functional Access Values:

- **BKRQApplication** - Whether the user is able to use Retain Booking Requests module.
  - No
  - Yes

- **BKRQAdministerRequests** - Ability to see submitted booking requests and administer them: reject, make live or send to ghost. In the Booking Requests module it determines whether the 'Admin' tab is visible.
  - No
  - Yes

- **BKRQArchiveView** - Ability to see inactive booking requests (either live, logged or rejected) in the Booking Requests module.
  - None - The 'Archive' tab is not shown.
  - Self - The 'Archive' tab is shown but searches can be only performed on booking requests originated by the user.
  - All - The 'Archive' tab is shown and searches are open (subject to row and logical security).

- **BKRQConflicts** - Whether the user can make booking requests that would create a conflict (if lived).
  - No
  - Yes

- **BKRQDetails** - Whether the user can open the detailed view of a booking request.
  - No
  - Yes

- **BKRQEditChargeRates** - Whether the user can edit the charge rates of booking lines in the booking requests.
  - None - No ability to see or edit charge rates of the booking request lines.
  - View - Read only access to the charge rate information.
  - Write - Ability to read and edit the charge rates.

- **BKRQEditLoading** - Ability to edit the loading of booking request lines.
  - No
  - Yes

- **BKRQRequestResources** - Ability to see booking requests submitted by yourself or all of the resources. In the Booking Requests Module it determines whether the user is able to see the 'User' tab; in Wallchart it determines which booking requests the user will see.

- None - No ability to see booking requests.
- Self - Ability to see booking requests created by the user you are logging in as.
- All - Ability to see booking requests created by all users.

- **BKRQRequestTasks** - Whether the user is able to submit booking requests. The extensiveness of this functionality is partly determined by the *BKRQRequestResources* functional access.
  - No
  - Yes

- **BKRQTimes -** Currently not in use.
  - None
  - View
  - Edit

Retain Skills Functional Access Values:

- **SkillsManager** - Whether the user can run skillmng32.exe.
  - None - No ability to run the executable.
  - Full - Ability to run the executable.

- **SkillsQuery** - Whether the user can run skillsel.exe.
  - None - No ability to run the executable.
  - Full - Ability to run the executable.

Retain Wallchart Functional Access Values:

- **ret3DView** - Whether the user is able to see the three-dimensional (3D) Wallchart view.
  - No
  - Yes

- **retAttachments** - Whether the user is able to use the attachments functionality.
  - No
  - Yes

- **retAutoJobSpecificComponents** - Whether the user is able to create job-specific components through the 'Booking' dialog.
  - No
  - Yes

- **retBkgDialogNewJob** - Whether the user can see the 'Create job' button in the 'Booking' dialog.
  - No
  - Yes

- **retBkgFrmCheckZero** - Whether the user is allowed to create zero time bookings.
  - None - Ability to create zero time bookings.
  - Warning - A warning message appears but the user is able to create zero time bookings.
  - Error - No ability to save zero time bookings.

- **retBkgJobDateRangeCheck** - Whether Retain checks if a booking's end date is after the end date of the relevant job.
  - None - The check is not performed.
  - Warning - A warning appears if a booking's end date is after the end date of the relevant job.
  - Error - An error message appears when the user tries to save a booking that ends after the relevant job has ended.

- **retBkgOverallocation** - Whether the user is able to create booking over-allocations.
  - None - Ability to create booking over-allocations.

  - Warning - A warning message appears but the user is able to create booking over-allocations.
  - Error - No ability to create booking over-allocations.

- **retBookingRequest** - Whether the user is able to create booking requests. Whether the booking requests are visible to the user or not is determined by *BKRQRequestResources* and *BKRQAdministerRequests* functional access rights.
  - No
  - Yes

- **retCopyFieldOrder** - Whether the copied fields (selected using the copy checkboxes functionality) will be pasted in the same order as they appear in the 'View/Edit' dialog.
  - NotOrdered - The copied fields are pasted in the default order, as specified in Retain Security Manager.
  - FieldOrder - The copied fields are pasted in the same order as they appear in the dialog.

- **retCustomRate** - Whether the users can see the custom rates control in the ‘Booking’ dialog. **Note:** Changes will only take effect after right-clicking within the dialog and selecting 'Reset Dimensions' from the menu.
  - No
  - Yes

- **retGhostBookings** - Whether the user is able to see or edit ghost bookings.
  - None - No ability to see or edit ghost bookings.
  - View - Ability to see ghost bookings only.
  - Edit - Ability to edit ghost bookings.

- **retMandatoryValidation** - Whether the validator for mandatory fields shows an error on save or always.
  - OnlyOnSave - Shows the error on save only. No warning regarding mandatory fields appears until the user clicks on the 'Save' button.
  - Always - Shows the error about missing mandatory fields (if there are any) within the 'Booking' dialog.

- **retNumberFormattingDialog** - Whether the 'Numeric Formatting' dialog is shown within Wallchart.
  - No
  - Yes

- **retRollForward** - Whether the user is able to use the roll forward functionality.
  - No
  - Yes

- **retScenarioRollbackOnChanges** - Whether the user is able to rollback a scenario that has been edited.
  - Denied - No ability to rollback a scenario.
  - Warning - A warning message appears but the user is able to rollback a scenario.

- **retScenarios** - Whether the user is able to use scenarios.
  - No
  - Yes

- **retSkills** - Whether the user is able to use the Skills functionality.
  - No
  - Yes

- **retTeamView** - Currently not in use.
  - No
  - Yes

- **retUserLevel** - Whether the user is able to view or edit records.
  - None - No access to Retain Wallchart.
  - viewOnly - Ability to view Wallchart pages only. Cannot view reports or add/insert/rename/delete pages.
  - fullViewer - Ability to view all pages and add/insert/rename/delete pages.
  - power - Full access to Retain Wallchart.

Retain Enterprise Reports Functional Access Values:

- **rrpConsolidation** - Whether the user is able to report across multiple databases. Should be set to 'No' unless instructed otherwise.
  - No
  - Yes

- **rrpGeneral** - Whether the user has general access to Enterprise Reports. Should normally be set to the same value as *rrpReports* functional access.
  - None - No ability to access Enterprise Reports.
  - View - Ability to view Enterprise Reports only.
  - Edit - Ability to edit Enterprise Reports.

- **rrpReports** - Whether the user has access to individual reports. Should normally be set to the same value as *rrpGeneral* functional access.
  - None - No ability to access individual reports.
  - View - Ability to view individual reports only.
  - Edit - Ability to edit individual reports.

Retain Security Manager Functional Access Values:

- **rsmApplication** - Whether the user is able to access Retain Security Manager.
  - None - No ability to access Retain Security Manager.
  - Part - Ability to access some parts of Retain Security Manager, as defined by other functional access values (listed below).
  - All - Ability to access Retain Security Manager despite of what the other settings are.

- **rsmChargeRate** - Whether the user is able to edit charge rates.
  - None - No ability to edit charge rates.
  - Edit - Ability to edit existing charge rates.
  - AddRemove - Ability to add or remove charge rate categories.

- **rsmColorScheme** - Whether the user is able to edit colour schemes.
  - None - No ability to edit colour schemes.
  - Edit - Ability to edit existing colour schemes.
  - AddRemove - Ability to add or remove colour schemes.

- **rsmCurrency** - Whether the user is able to edit currencies.
  - None - No ability to edit currencies.
  - Edit - Ability to edit currencies.

- **rsmDay** - Whether the user is able to edit settings for days.
  - None - No ability to edit settings for days.
  - Edit - Ability to edit existing settings for days.
  - AddRemove - Ability to add or remove day types.

- **rsmDBSettings** - Whether the user is able to edit database settings.
  - No
  - Yes

- **rsmDiary** - Whether the user is able to edit diaries.
  - None - No ability to edit diary settings.
  - Edit - Ability to edit existing diary settings.
  - AddRemove - Ability to add or remove diaries.

- **rsmEditGrd** - Whether the user is able to edit grades.
  - None - No ability to edit grades.
  - Edit - Ability to edit existing grades.

  - AddRemove - Ability to add or remove grades.

- **rsmGroup** - Whether the user is able to edit security groups.
  - None - No ability to edit security groups.
  - Edit - Ability to edit existing security groups.
  - AddRemove - Ability to add or remove security groups.

- **rsmRole** - Whether the user is able to create new or edit existing security roles.
  - None - No ability to edit security roles.
  - Edit - Ability to edit existing security roles.
  - AddRemove - Ability to add or remove security roles.

- **rsmScript** - Whether the user is able run scripts.
  - No
  - Yes

- **rsmTableDefaults** - Whether the user is able to edit the settings for tables.
  - No
  - Yes

- **rsmUser** - Whether the user is able to create new or edit existing users.
  - None - No ability to edit users.
  - Edit - Ability to edit existing users.
  - AddRemove - Ability to add or remove users.
  - AssignAdminGroups - Highest level of access, including the ability to delegate the use of Retain Security Manager using the 'Administrator for Groups' option against delegated users.

- **rsmWeek** - Whether the user is able to edit settings for weeks.
  - None - No ability to edit settings for weeks.
  - Edit - Ability to edit existing settings for weeks.
  - AddRemove - Ability to add or remove week types.

Retain Time Functional Access Values:

- **timeAdminLogon** - Whether the user is able to log on without an assigned resource.
  - N
  - Y

- **timeApproveJob** - Whether the user is able to approve by job (access Approve Job view).
  - N - No ability to approve by job.
  - View - Ability to view jobs and people allocated to each job.
  - Y - Ability to approve by job.

- **timeApprovePerson** - Whether the user is able to approve by staff (access Approve Person view).
  - N - No ability to approve by staff.
  - View - Ability to read time sheets against people.
  - Y - Ability to approve by staff.

- **timeApprover** - Whether the user is able to approve the time sheet.
  - N - The default value. No ability to approve the time sheet.
  - Y - Ability to approve the time sheet.

- **timeCanExport** - Whether the user is able to view the export section.
  - No
  - Yes

- **timeCanImport** - Whether the user is able to view the import section.
  - No
  - Yes

- **timeChargeView** - Whether the user can see the charge view.
  - N
  - Y

- **timeEditComponents** - Whether the user is able to edit the component section.
  - N - The component section is hidden.
  - View - Ability to view the component section only.
  - Y - Ability to edit the component section.

- **timeEditJobs** - Whether the user is able to edit the jobs section.
  - N - The jobs section is hidden.
  - View - Ability to view the jobs section only.
  - Y - Ability to edit the jobs section.

- **timeEditRates** - Whether the user is able to edit the rates section.
  - N - The rates section is hidden.
  - View - Ability to view the rates section only.
  - Y - Ability to edit the rates section.

- **timeEditResources** - Whether the user is able to edit the resource section.
  - N - The resource section is hidden.
  - View - Ability to view the resource section only.
  - Y - Ability to edit the resource section.

- **timeLimitJobs** - Whether the user is able to access the jobs according to the settings.
  - N - Ability to access all the jobs.
  - Y - Restricts access to jobs according to the settings.

- **timePeriodSetup** - Whether the user is able to edit the periods section.
  - N - The periods section is hidden.
  - View - Ability to view the periods section only.
  - Y - Ability to edit the periods section.

- **timeReportingLevel** - Whether the user is able to view or edit reports.
  - Full - Ability to view and edit reports.
  - Default - Ability to view all the reports.
  - Own - Ability to view user's own reports.
  - None - No ability to see the reporting tool.

- **timeRetainTimeSettings** - Whether the user is able to edit the settings dialog.
  - N - The default value. The user is able to view the settings only.
  - Y - Ability to edit the settings.

- **timeTimesheetEntry** - Whether the user can see the time view.
  - N
  - Y

- **timeValueView** - Whether the user can see the value view.
  - N
  - Y

Retain Web Functional Access Values:

- **webAllowSelections** - Whether the user can modify the selections.
  - No
  - Yes

- **webAllowViewTemplates** - Whether the template selection control is available to the user.
  - No

  - Yes

- **webAspDoc** - Currently not in use.
  - No
  - Yes

- **webAvailJobs** - Currently not in use.
  - None
  - View
  - Request

- **webCVEdit** - Ability to edit the CV document for self or other resources.
  - None - No ability to edit the CV document.
  - EditOwn - Ability to edit only the user's own CV document.
  - EditAll - Ability to edit all CV documents.

- **webCVView** - Whether the user is able to view the CV document for self or other resources. This functionality is partly determined by the *webCVEdit* functional access.
  - None - The user can not view the CV documents.
  - ViewOwn - The user can view only his/her own CV document.
  - ViewAll - The user can view the CV document of all of the resources.

- **webDetailsEdit** - Ability to edit the Personal Details for self or other resources.
  - None - No ability to edit the Personal Details of resources.
  - EditOwn - Ability to edit your own Personal Details only.
  - EditAll - Ability to edit the Personal Details of all of the resources.

- **webDetailsView** - Whether the user is able to view the Personal Details of resources. This functionality is partly determined by the *webDetailsEdit* functional access.
  - None - The user cannot view the Personal Details of resources.
  - ViewOwn - The user can view only his/her own Personal Details.
  - ViewAll - The user can view the Personal Details of all of the resources.

- **webDetImage** - Whether the user is able to view and upload a resource picture in the Details page.
  - No
  - Yes

- **webEditHistBkg** - Whether the user is able to edit bookings in the past.
  - No
  - Yes

- **webEditJobs** - Whether the user is able to view or edit jobs.
  - View - The user is able to view the job details only.
  - Edit - The user is able to create new jobs and update the existing ones.

- **webEditMasterRec** - Whether the user is able to view or edit the master records.
  - View - The user is able to view the master records only.
  - Edit - The user is able to edit the master records.

- **webEditRes** - Whether the user is able to view or edit resources.
  - View - The user is able to view the resource details only.
  - Edit - The user is able to create new resources and update the existing ones.

- **webEditSelFavs** - Whether the user is able to save the selection criteria as shared.
  - No - The user is unable to save selections as shared.
  - EditOwn - The user is able to share his/her own selections but cannot edit selections saved as shared by other users.
  - EditAll - The user is able to share his/her own selections and edit selections saved as shared by other users.

- **webForecast** - Currently not in use.
  - None

  - Self
  - Full

- **webForecastEditDay** - Whether the user is able to edit the Forecast values by day.
  - No
  - Yes

- **webForecastEditMonth** - Whether the user is able to edit the Forecast values by month.
  - No
  - Yes

- **webForecastEditWeek** - Whether the user is able to edit the Forecast values by week.
  - No
  - Yes

- **webForecastJobEdit** - Ability to edit the Forecast values by job.
  - None - No ability to edit the Forecast by job.
  - EditOwn - Ability to edit the Forecast values of the jobs which are the resources 'Own', as defined by the 'IsMyJob' calculated field.
  - EditAll - Ability to edit the Forecast values by job for all the resources.

- **webForecastJobView** - Ability to view the Forecast values by job.
  - None - No ability to view the Forecast by job.
  - ViewOwn - Ability to view the Forecast values of the jobs which are the resources 'Own', as defined by the 'IsMyJob' calculated field.
  - ViewAll - Ability to view the Forecast values by job for all of the resources.

- **webForecastResEdit** - Ability to edit the Forecast values by resource.
  - None - No ability to edit the Forecast values by resource.
  - EditOwn - The user is able to edit only his/her own Forecast values.
  - EditAll - The user is able to edit the Forecast of all of the resources.

- **webForecastResView** - Whether the user can view Forecast by resource.
  - None - The user is unable to view the Forecast page by resource.
  - ViewOwn - The user is able to view his/her own Forecast only.
  - ViewAll - The user is able to view the Forecast of all of the resources.

- **webJobs** - Whether the user can see the Jobs page.
  - None - The Jobs page is hidden for the user.
  - View - The user is able to see the Jobs page and can only view bookings.
  - Edit - The user is able to see the Jobs page and can edit bookings.

- **webMyPref** - Whether you can view or edit your own Preferences.
  - None - The Preferences section is hidden for the user.
  - viewAll - User can see his/her own Preferences.
  - editAll - User can edit his/her own Preferences.

- **webOtherPref** - Whether the user can view or edit other resources Preferences.
  - None - The Preferences of other users are hidden.
  - viewAll - User can see Preferences of all the users.
  - editAll - User can edit Preferences of all the users.

- **webPeople** - Whether the user can see the Individuals page.
  - None - The Individuals page is hidden for the user.
  - View - The user is able to view the Individuals page and can only view bookings.
  - Edit - The user is able to view the Individuals page and can edit bookings.

- **webPlannerSelectAll** - Whether the user is able to see any records in the Wallchart view when no selection is applied.
  - No
  - Yes

- **webReportEmail** - Whether the user is able to e-mail the report results to other users.
  - No
  - Yes

- **webReports** - Specifies which predefined set of reports the user will be able to run. The extensiveness of this functionality partly depends on the other reports related functional access values.
  - None - The Reports page is hidden for the user.
  - r1 - The user is able to choose from the set of reports defined in the Reports1 folder.
  - r2 - The user is able to choose from the set of reports defined in the Reports2 folder.
  - r3 - The user is able to choose from the set of reports defined in the Reports3 folder.
  - r4 - The user is able to choose from the set of reports defined in the Reports4 folder.

- **webReportsAdmin** - Whether the user is able to edit the interactive reports categories.
  - No
  - Yes (this value is intended only for users with the *webReportsDynamic=EditAll* functional access value)

- **webReportsDynamic** - Allows to specify the access level for the interactive reporting functionality.
  - None - The user is not able to access the functionality.
  - View - The user is able to run interactive reports.
  - EditOwn - The user is able to run, create and edit interactive reports for himself/herself only.
  - EditAll - The user is able to run, create and edit as well as publish interactive reports to other users.

- **webReportsPublishing** - Allows to specify the publishing options for interactive reports. **Note** that the users will always see the reports that they have created.
  - None - The user is not able to use the report publishing functionality.
  - Resources - The user is able to publish reports to specified resources.
  - Users - The user is able to publish reports to specified users.
  - Global - The user is able to publish reports to specified resources/users or everyone.

- **webReportsShowAllCalcFields** - Specifies which calculated fields the user will be able to see in Retain Web.
  - No - The user can only see the calculated fields with at least one flag specified in the *IncludeFlags* setting from *RetainGlobal.ini.*
  - Yes - The user can see all the calculated fields except for those with at least one flag in the *ExcludeFlags* setting from *RetainGlobal.ini*.

- **webRepRun** - Whether the user is able to run reports or only schedule them.
  - No - The user is able to schedule the reports only.
  - Yes - The user is able to run and schedule the reports.

- **webRepSelAll** - Whether the user is able to change the default values of various reports.
  - No
  - Yes

- **webRetain** - Currently not in use.
  - None
  - View
  - Edit

- **webRetainClient** - Currently not in use.
  - No
  - Yes

- **webScheduleEdit** - The ability to make changes in the resources' schedules.
  - None - The user is not able to create bookings.
  - EditOwnBkgRule - Not in use.
  - EditOwn - The user is able to edit his/her own bookings only.
  - EditAll - The user is able to edit the bookings of all of the resources.

- **webScheduleView** - Whether the user is able to view the Schedule for self and other resources.
  - None - The Schedule page is hidden for the user.
  - ViewOwn - The user is able to view his/her own schedule only.

  - ViewAll - The user is able to view the schedules of all of the resources.

- **webSearch** - Whether the user can see the Search and Lists pages.
  - No
  - Yes

- **webSkillsEdit** - Whether the user is able to edit the Skills for self and other resources.
  - None - The user is unable to edit resources' skills.
  - EditOwn - The user is able to edit his/her own skills only.
  - EditAll - The user is able to edit the skills of all of the resources.

- **webSkillsView** - The ability to view the Skills of self and other resources in the Details page. This functionality partly depends on the *webSkillsEdit* functional access value.
  - None - The user is unable to view resources' skills.
  - ViewOwn - The user is able to view his/her own skills only.
  - ViewAll - The user is able to view the skills of all of the resources.

- **webSummary** - Whether the user can access the Summary page.
  - No
  - Yes

- **webTeam** - Currently not in use.
  - No
  - Delegate
  - Yes

- **webTeamJobCombo** - Currently not in use.
  - No
  - Yes

- **webTimesheet** - Whether the user is able to use the timesheet functionality.
  - No
  - Yes

- **webViewHistBkg** - The ability to view resources' History Bookings in the Details page.
  - viewOwn - The user is able to view his/her own History Bookings.
  - viewAll - The user is able to view the History Bookings for all of the resources.

Miscellaneous Functional Access Values:

- **ChangeOwnPassword** - Whether the user is able to change his/her own password.
  - No
  - Yes

Notes:

- Only a power user (*retUserLevel=power*) can make normal and ghost bookings.

- A higher level of access will always override a lower one.

- If the Retain Security Manager access is set to all functions i.e. *rsmApplication=All*, then the subsidiary functions in Retain Security Manager do not need to be defined and are left blank. If you assign *rsmApplication=Part*, then you need to select the level of access required for all of the 'rsm' functions.

- The *rsmUser* value 'AssignAdminGroups' is the highest level of access to the 'Users' section in Retain Security Manager. This role permits the user to edit the list of users. Other administrators should therefore be assigned (*rsmApplication=Part*) with levels of access for 'rsm' functions assigned separately, as appropriate.

- Combine different functional roles to define specific roles. For example, a view only user (*retUserLevel=viewOnly*) can make booking requests (*retBookingRequest=Yes*).

Examples

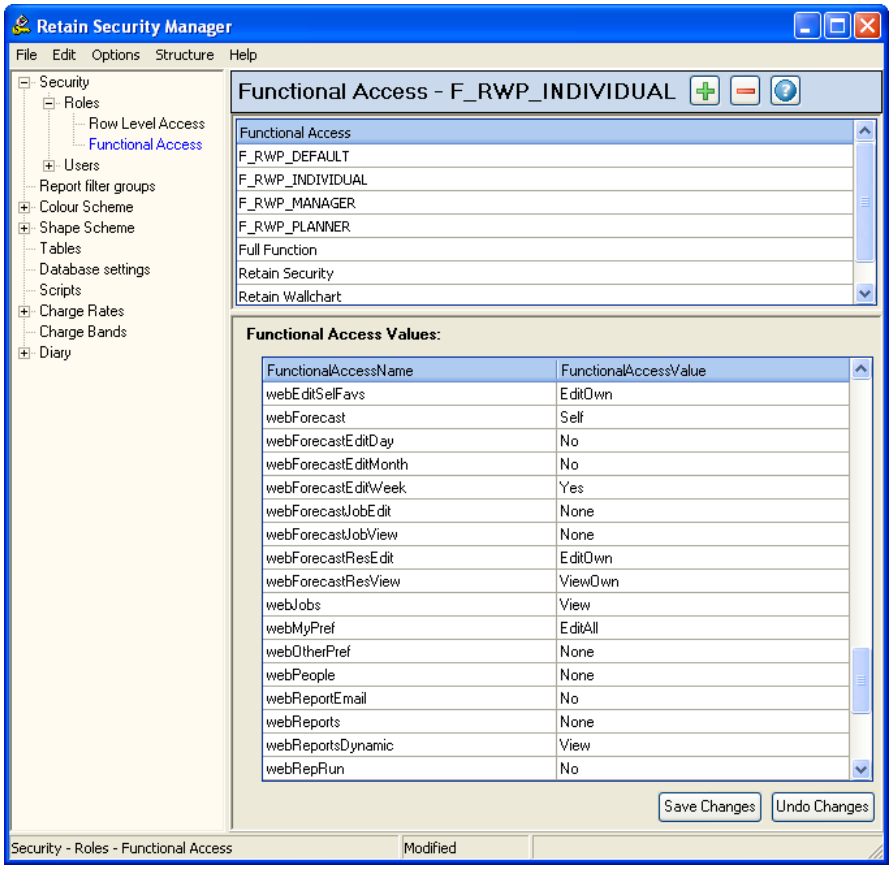
Functional Access roles determine the functionality of each Retain application that will be available to the user. If no functional access roles are defined, the user can not do anything with the data.

For instance, you can create the following functional access profiles: Individual, Planner and Manager where the functional access role will correspond to the real-life role of the user. Each profile will have a different set of functionality available.

The functional access roles of each of these users will also depend on the application in use - Wallchart, Web, Security Manager, etc. To illustrate, you could create the following profiles for Retain Web:

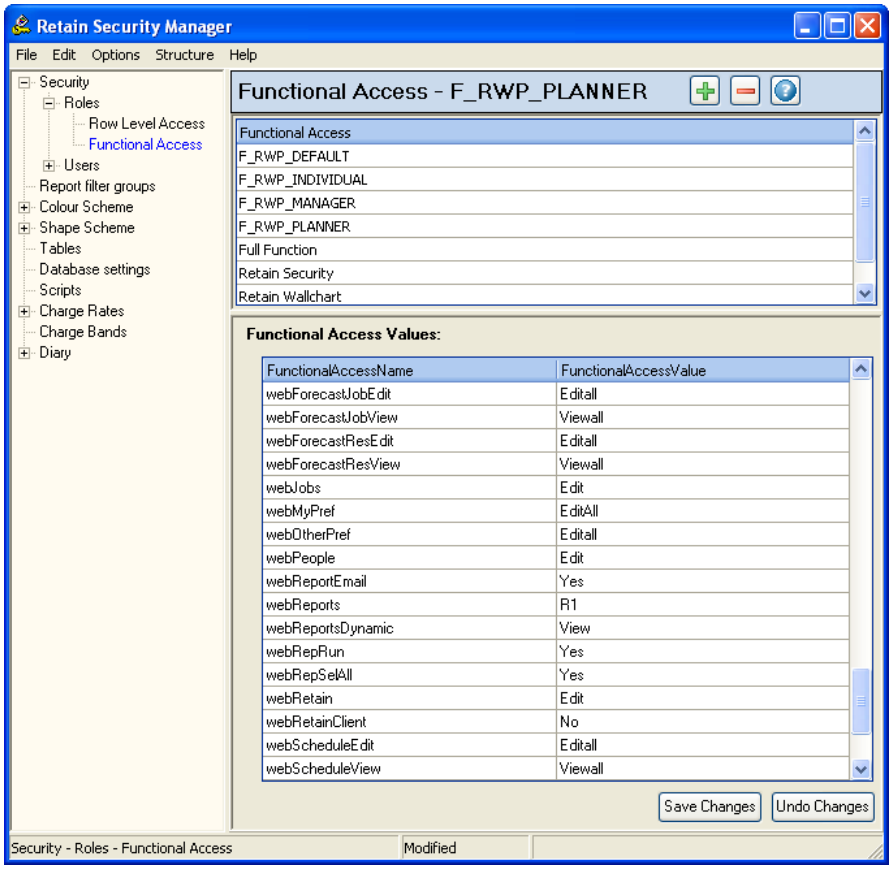
Retain Web Individual

This profile is the most restrictive and would be assigned to the majority of Web users who would be able to see their own data, view their own schedules and reports but not be able to edit any records. An example of functional access values are illustrated below:



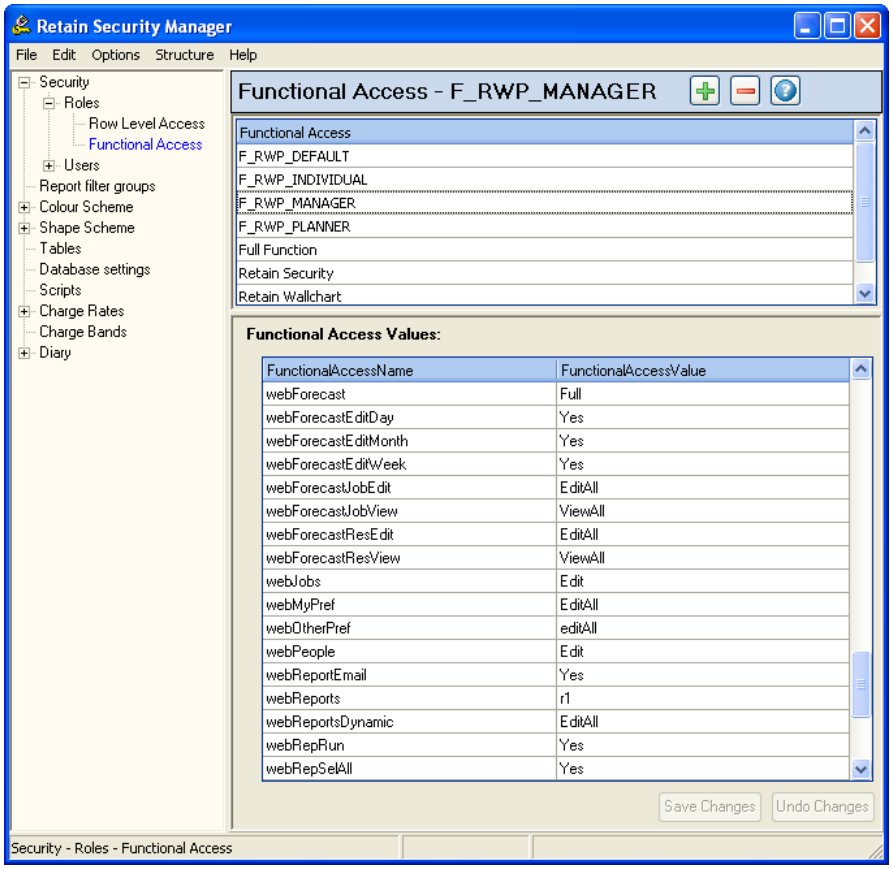
Retain Web Planner

This profile would be less restrictive and assigned to those users who would make bookings, run certain reports and edit the relative data:



Retain Web Manager

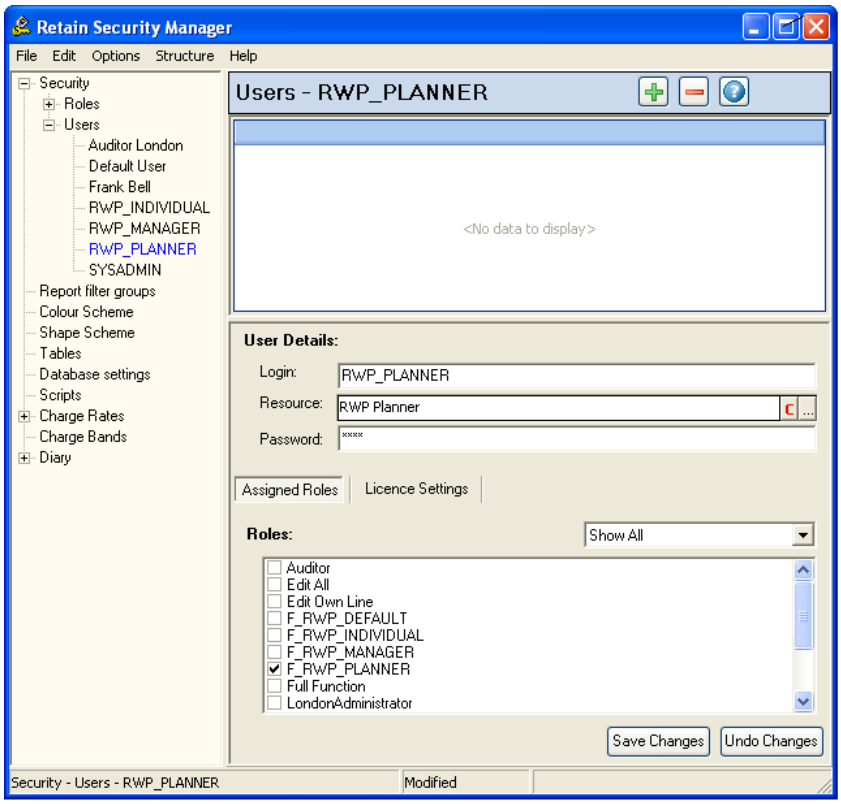
This profile and would allow the users to view and edit all the data. The possible functional access values would be:



Note that when multiple functional access roles are assigned to the same user, the higher level of access will override the lower one. See the previous section for the list of all functional access values.

4.3 Users

The resources in the database are linked to the Retain Security Manager users. In the context of Retain security model, users are defined through a set of security access roles. Each resource may be linked to only one user, whereas a user could be linked to several resources (all the resources linked to the same user will have the same security rights). Therefore, you do not need to create the same number of users as there are resources:



To add a new user:

1. Right-click on Users and select 'Add' from the menu or click on the button.
2. Enter a name for the user.
3. *Login* should be the same as the user's Windows login which can be confirmed using the whoAmI.exe utility.
4. *Resource* can then be selected, if the user is a resource in Retain and requires an 'Edit Own Line' role.
5. *Password* should always be left blank unless you would like to password protect access to Retain. Retain is set up to use the Windows user name to identify users and does not prompt for passwords by default.
6. Save the changes by clicking on the Save Changes button.

You can now assign the appropriate roles to each user by ticking the appropriate checkboxes.

The drop-down list on the right-hand side of the 'Roles' section contains several levels of roles to select from, e.g. Functional Level. You can use the drop-down to select the types of roles you would like to view. 'Show All' will display all the available roles:

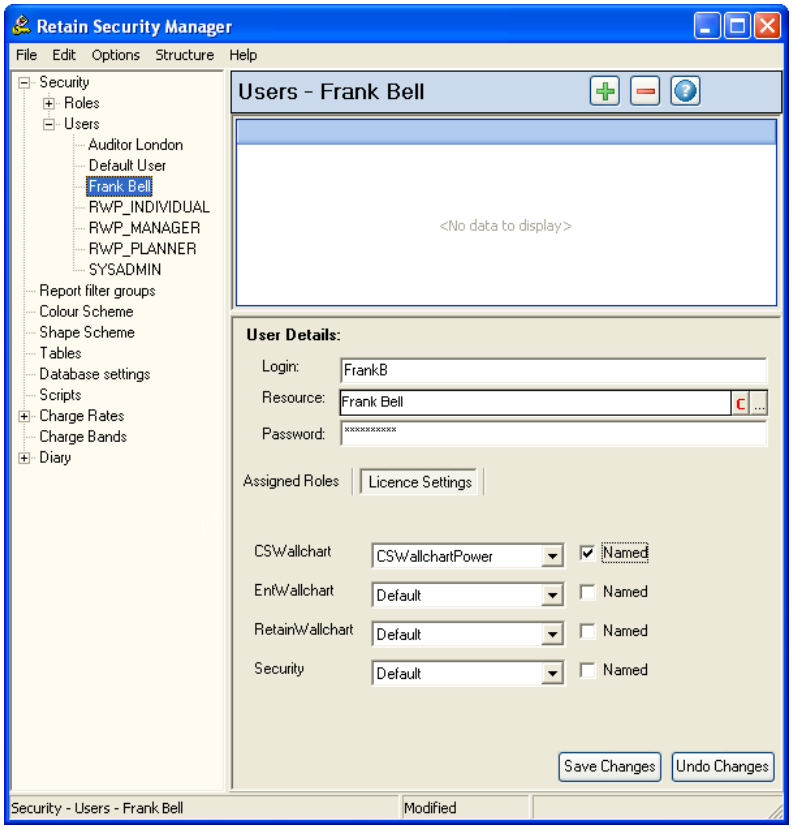
- *Edit All* - have full access permissions to the 5 main tables
- *Edit Own Line* - can only edit user's own bookings and related details

- *Full Function* - full access to Retain Wallchart, Retain Security Manager and any other additional modules (such as Booking Requests)
- *Read Only* - can only view information within the Wallchart (but cannot edit it)
- *Retain Security* - full access to Retain Security Manager only
- *Retain Wallchart* - full access to Retain Wallchart only

Licence Settings

The 'Licence Settings' tab controls the default level of access to the Retain applications according to your licensing information.

These should normally be left unchanged:



However, if you have named (fixed) user licence(s) instead of concurrent user licence(s), then you must select an access level from the drop-down list against the appropriate module and tick the 'Named' checkbox.

Default User

Before any users have been set up, there is only one user, called the 'Default User'. It is recommended that you never delete the default user or modify the login details, even though you can change the roles assigned to it.

The security roles which are assigned to the linked user are applied to all the other users in the Retain security model as well. This means that if there is a 'Read Only' row level access value which is assigned to the default user, any other user has that value assigned, even if the security value is not ticked in the user configuration window.

After the initial installation of the Retain software suite, the default user is initially assigned all the necessary roles in order for anyone to be able to access Retain Security Manager. This allows to complete the initial configuration of the deployment. Once an Administrator user has been set up, you may want to change the roles assigned to this user to the minimum set of roles you want to grant to someone connecting to the Retain software suite.

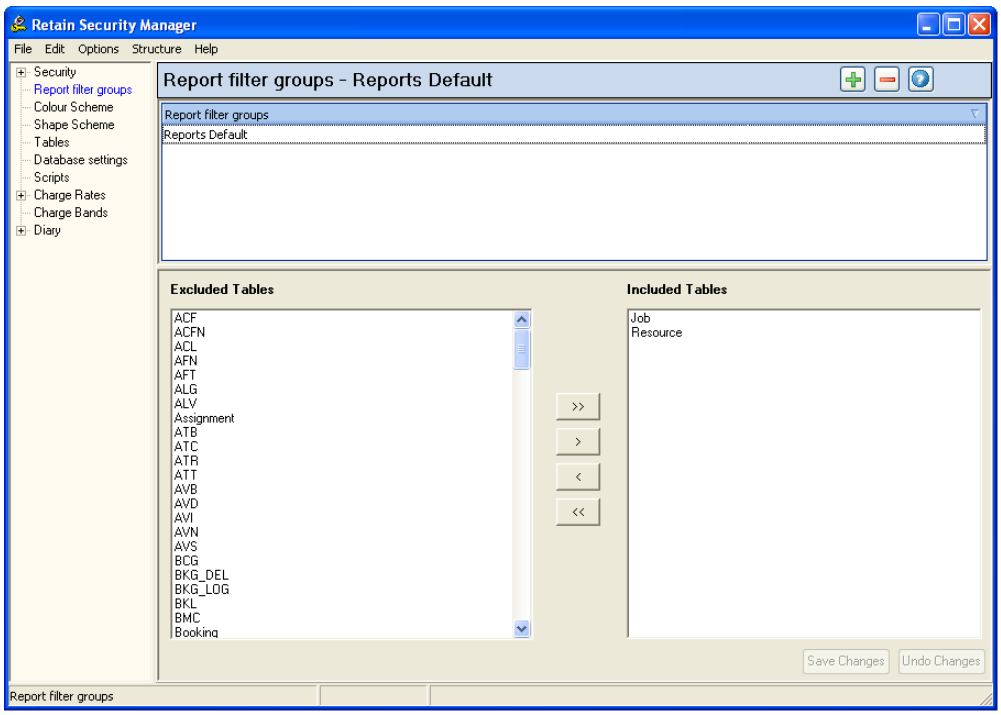
Note: make sure you do not to remove 'Retain Security' user access role from the default user until you are sure you have an alternative user with access to Retain Security Manager.

5 Report Filter Groups

The 'Report Filter Groups' option is used to define groups of database tables that different Retain applications (e.g. Retain Web or Retain Enterprise Reports) may refer to.

You can create groups of certain tables, depending on your requirements. This functionality is especially useful if you normally report on fields from the same tables.

For example, if you report on fields from the Resource and Job tables only, you can add these two tables to the group:



In Retain Web, 'Reports Default' group defines the list of tables you can report on using the interactive reports functionality. It is therefore not recommended to delete this group.

In Retain Enterprise Reports you can define multiple groups of tables that you will be able to select from when creating a report.

To create a list:

1. Click on the button

2. Enter a descriptive name and press 'OK'.

3. Click on the Save Changes button. The list will consist of the tables specified in the 'Included Tables' section.

To add a table, select it from the 'Excluded Tables' section and double-click on it. Alternatively, select a table and click on the button.

To remove a table from the included tables list, select it and click on the button.

You can also **include all the available tables** by clicking on the button or **exclude all** by clicking on

the << button.

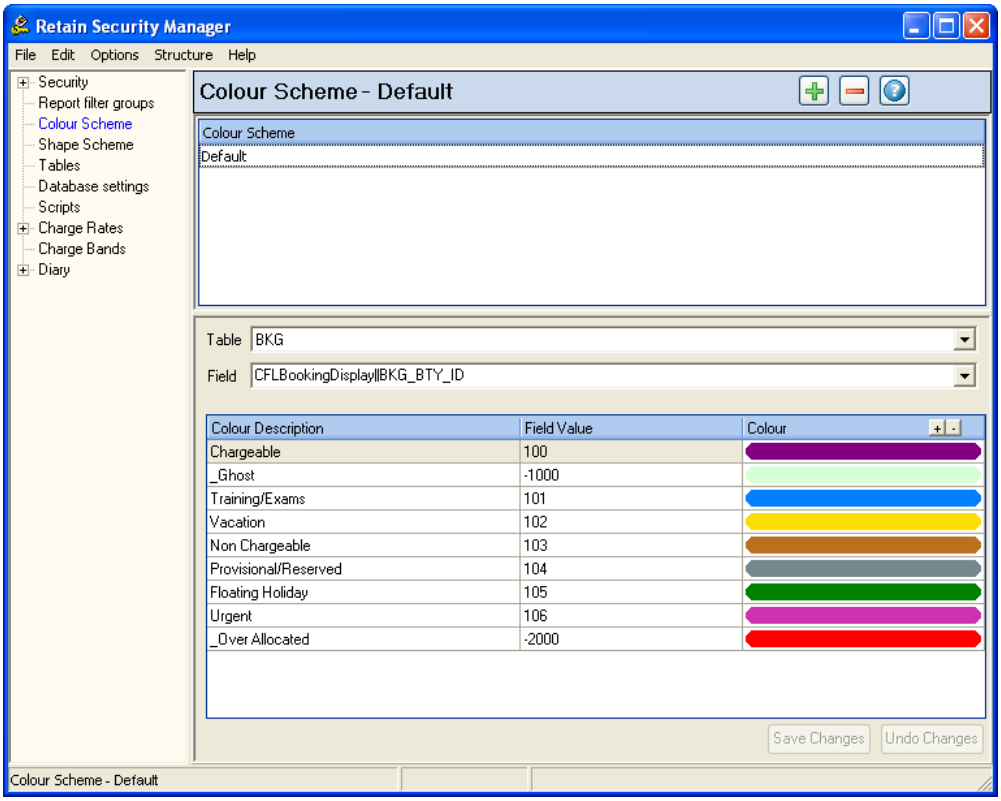
6 Colours

6.1 Overview

Using the 'Colour Scheme' option in Retain Security you can define the colour coding of bookings by editing the default colour scheme.

A colour scheme is a set of colours with each colour representing a certain value related to the booking.

For example, your default colour scheme may define the bookings according to their type:



6.2 Managing Colours

You can edit the default colour scheme by altering the database table and field it is based on:

- Select a table that the scheme will be based on from the 'Table' drop-down list.

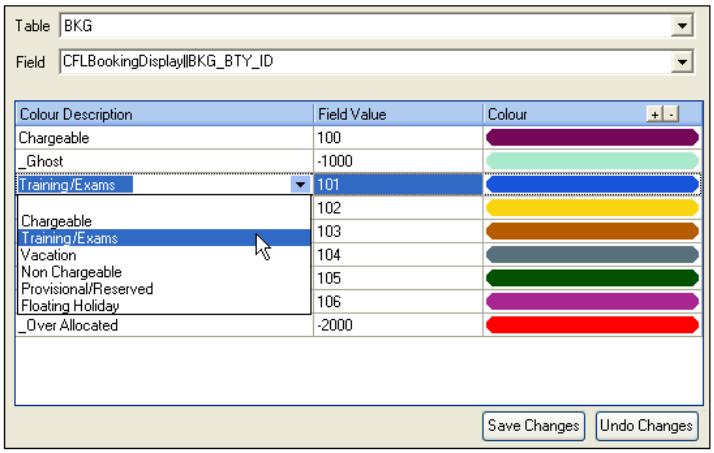
Notes:

- You should only use tables that are directly linked to bookings, i.e. the Booking (BKG) table: RES (Resources), JOB, JAS (Assignment), BTY (Booking Type) and CMP (Component).
- If you wish to allow Retain Wallchart users to change the colour of a booking using the 'Colour Legend', use the BKG (Booking) table.

- Select a field the colour scheme will be based on from the 'Field' drop-down list. Adding ' CFLBookingDisplay||' before the field name as well as assigning '-2000' and red colour to one of the values allows you to represent bookings in conflict in red within Wallchart (see the 'Over-allocation notification' section in Retain Wallchart User Guide for more information).

Before defining the values, you need to add rows by clicking on the + button in the top right-hand corner. To delete a row, click on the - button.

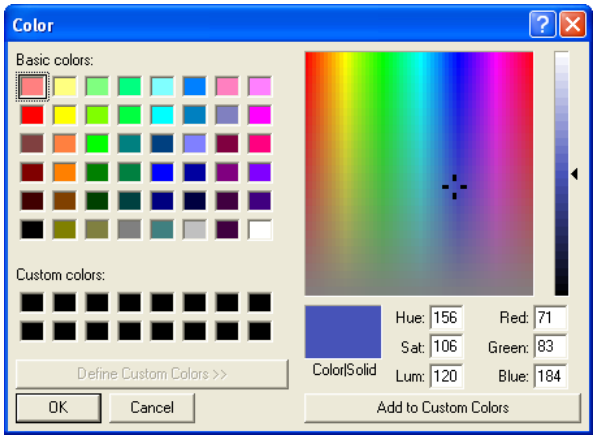
Colour Description – this is the description of the booking colour that the users will see in Retain. If you are using a linked field (a field that links two tables, as in the example below), the possible values will be displayed in the drop-down list, once you click on the field:



Note: The '_' prefix for 'Gost' and 'Over Allocated' values means that the value is for internal use only and will not be shown as a context menu item in Retain Wallchart but will appear in the 'Colour Legend'.

Field Value – this is the field value that will be associated with the booking colour. The possible values will depend on the field you have selected in the 'Field' section.

Colour – double click on this field to reveal the 'Colour' dialog:



Select the necessary colour and click on 'OK'. The selected colour will be displayed in the *Colour* field.

Note that the order in which you define these values will determine the order the colours are presented in Retain.

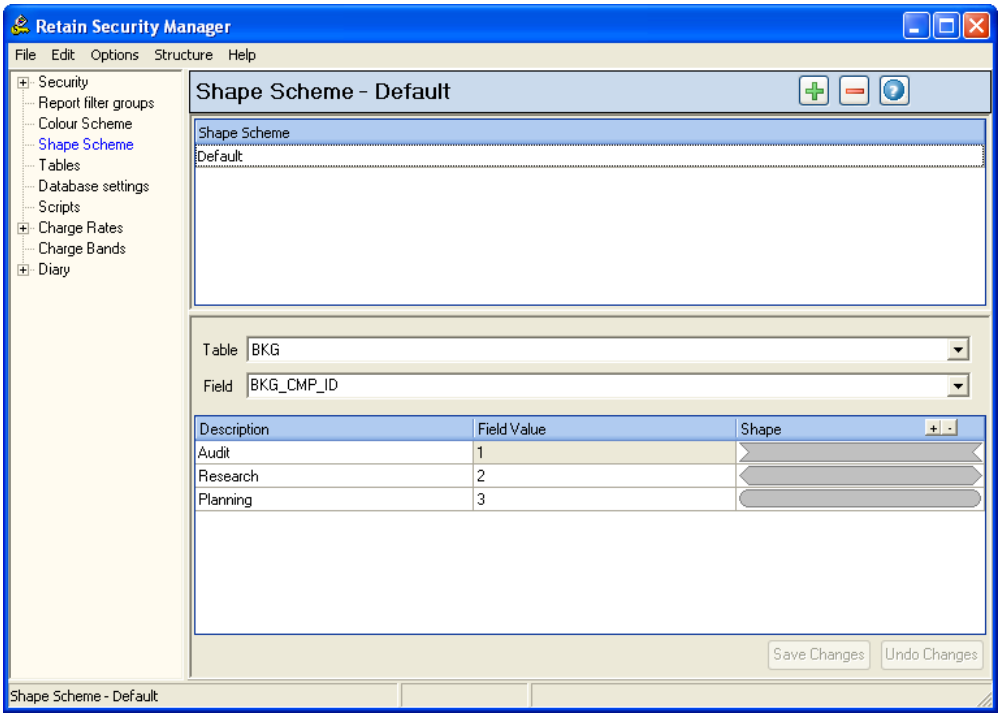
7 Shapes

7.1 Overview

In addition to colours, you can create bookings with different shapes.A shape scheme is a set of shapes with each shape representing a certain value related to the booking.

Using both colours and shapes enables you to visually represent two different values for each booking.

For instance, your default shape scheme may define the bookings according to their component:



7.2 Managing Shapes

You can edit the default shape scheme by altering the database table and field is is based on:

- Select a table that the scheme will be based on from the 'Table' drop-down list.

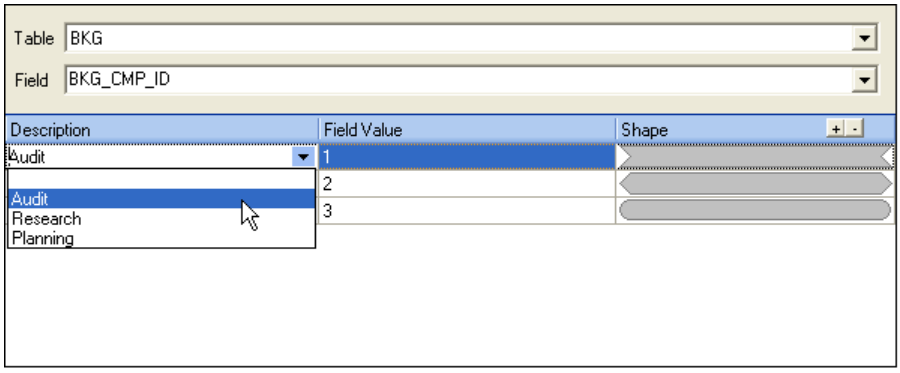
Notes:

- You should only use tables that are directly linked to bookings, i.e. the Booking (BKG) table: RES (Resources), JOB, JAS (Assignment), BTY (Booking Type) and CMP (Component).
- If you wish to allow Retain Wallchart users to change the shape of a booking using the 'Shape Legend', use the BKG (Booking) table.

- Select a field the shape scheme will be based on from the 'Field' drop-down list. For example, choose BKG_CMP_ID for a scheme based on booking component.

Before defining the values, you need to add rows by clicking on the + button in the top right-hand corner. To delete a row, click on the - button.

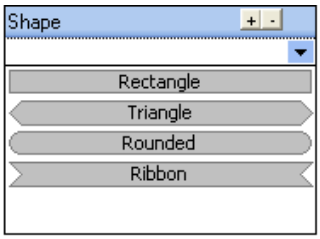
Description – this is the description of the booking shape that the users will see in Retain. If you are using a linked field (a field that links two tables, as in the example below), the possible values will be displayed in the drop-down list, once you click on the field:



Note: You can add the '_' prefix for to a value. This will mean that the value is for internal use only and will not be shown as a context menu item in Retain Wallchart but will appear in the 'Shape Legend'.

Field Value – this is the field value that will be associated with the booking shape. The possible values will depend on the field you have selected in the 'Field' section.

Shape – click on this field to reveal the list of available shapes:



Select the necessary shape which will be displayed in the *Shape* field.

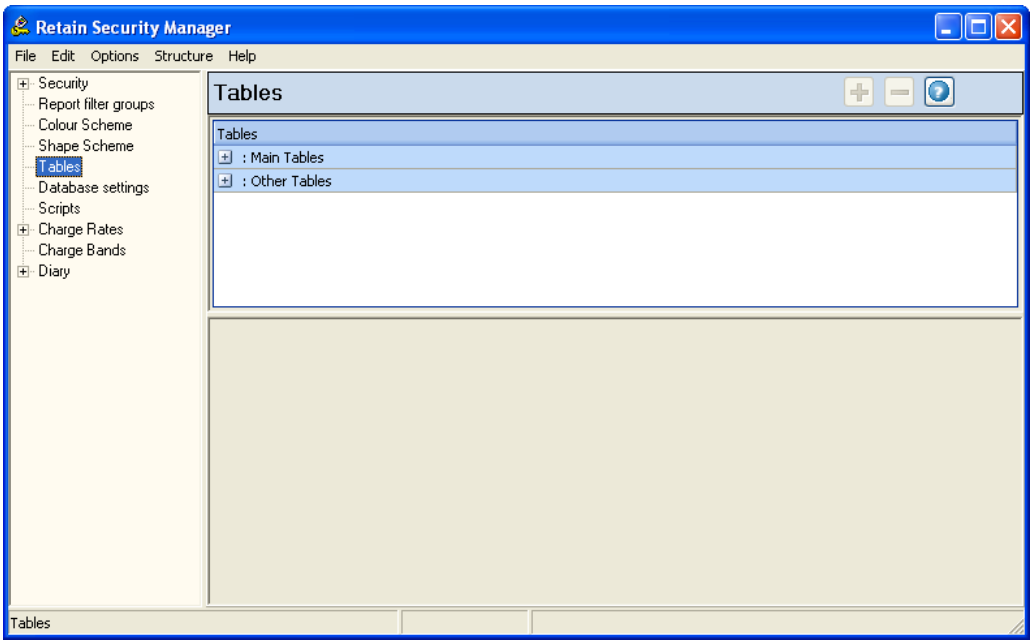
Note that the order in which you define these values will determine the order the shapes are presented in Retain.

8 Tables

8.1 Overview

The 'Tables' option in Retain Security provides a user friendly interface for working with the database tables and fields.

It allows you to manage field properties and define the field behaviour throughout Retain such as making fields hidden, changing the way numeric data is presented, limiting the values available for a field, etc:



Interface Features

Table Grouping

Table grouping is useful because you can group the tables that you work on more often than others into one set. Having the database tables grouped into 'Main' and 'Other', for example (see the picture above), allows you to quickly find a table within a group, without having to go through the whole list.

To open up a group, click on the ⊞ button. To close a group, click on the ⊟ button. You can define the tables that are included in a group within *Retaine.ini* file.

By default, you will see all the tables from the database in one list. Right-click on the 'Tables' option in the main menu and select 'Group by-> Common Tables' to enable grouping. Your grouping will be saved automatically.

Note: If there is more than one person who has access to Retain Security, changes might be made simultaneously. Use 'Refresh' option from the right-click menu to make sure you see the most recent changes.

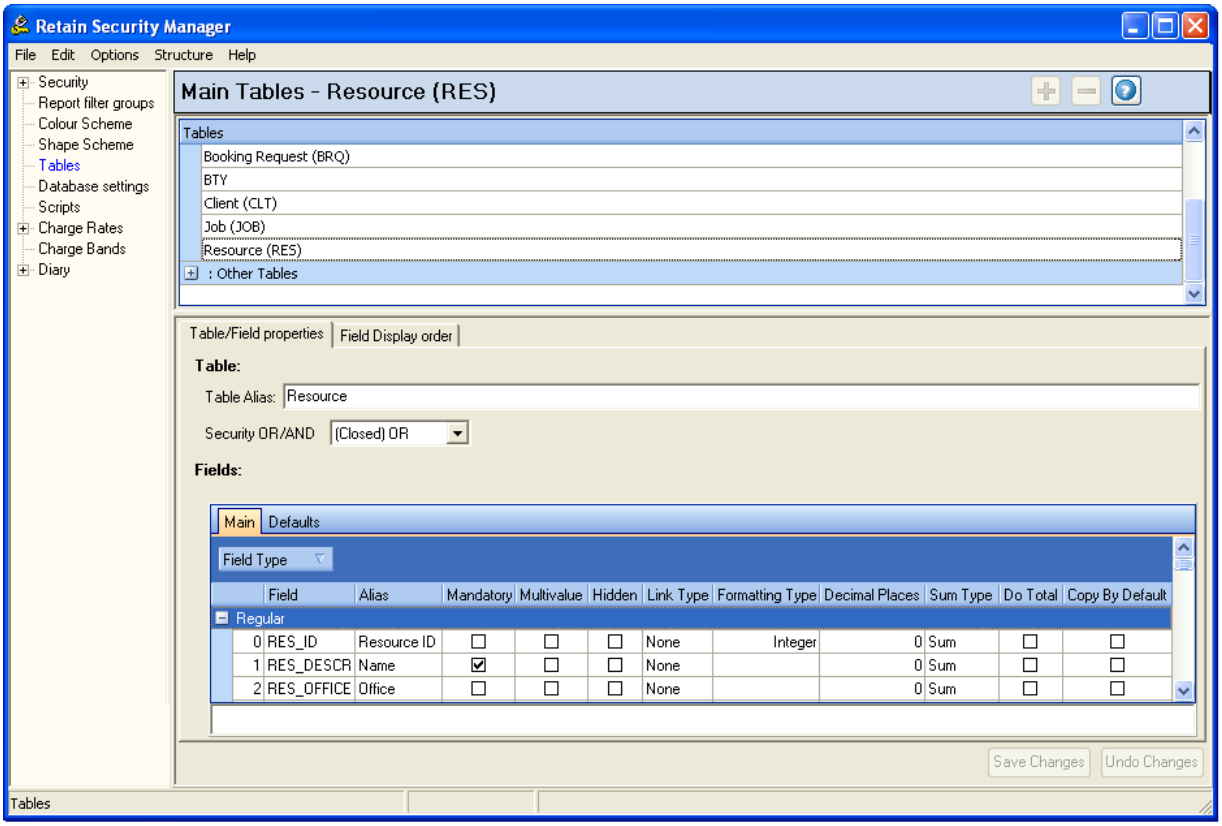
Autosearch Functionality

To quickly locate a required table, start typing its name in the 'Tables' list. The relevant table will located in the list and highlighted.

If you make any changes, make sure to click on the Save Changes button to save them.

8.2 Table/Field Properties

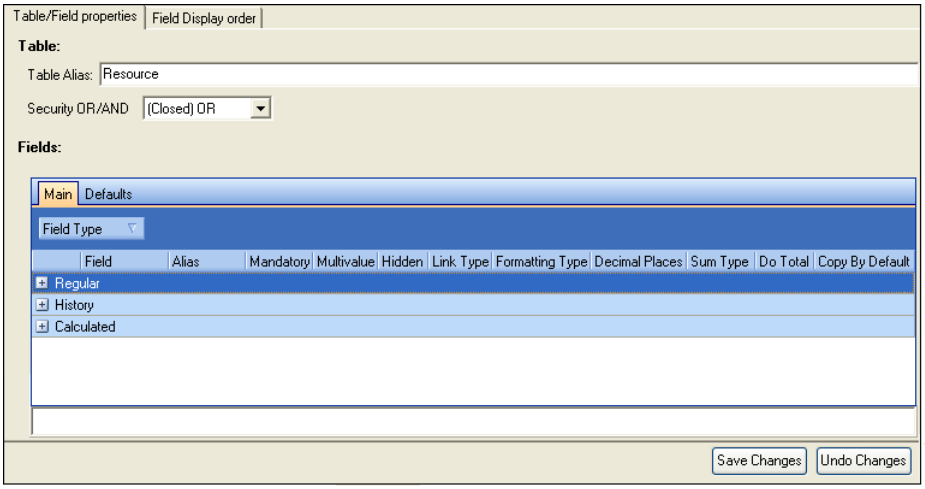
Using the 'Table/Field Properties' tab you can manage the table and field information. Once you have selected a required table, its properties will be displayed in the bottom pane:



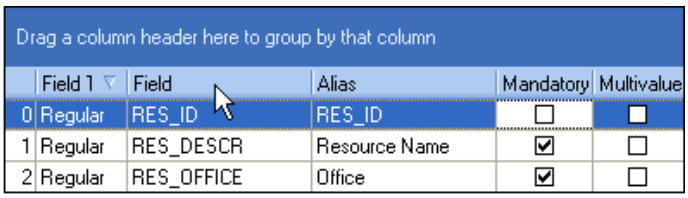
The 'Table' section displays the OR/AND security as well as 'Table Alias'. In most cases, the default table aliases will be sufficient. Otherwise, you can enter a descriptive name for the table in the editable box.

The 'Fields' section allows you to manage field properties. By default, fields are grouped according to the Field Type. The first field type group (in this example 'Regular') will be expanded each time the view is refreshed.

There are three types of fields: 'Regular', 'History' (fields defined with dates) and 'Calculated' (fields defined by specific calculations). To see all three types, you can scroll down the list on click on the button:

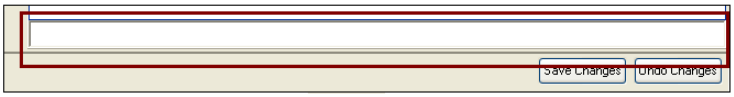


You can change the grouping of fields and re-arrange the ordering of columns by moving column headers. For instance, to group the fields according to the field name, move the 'Field Type' box down with the other column headers and move the 'Field' header in the area provided:



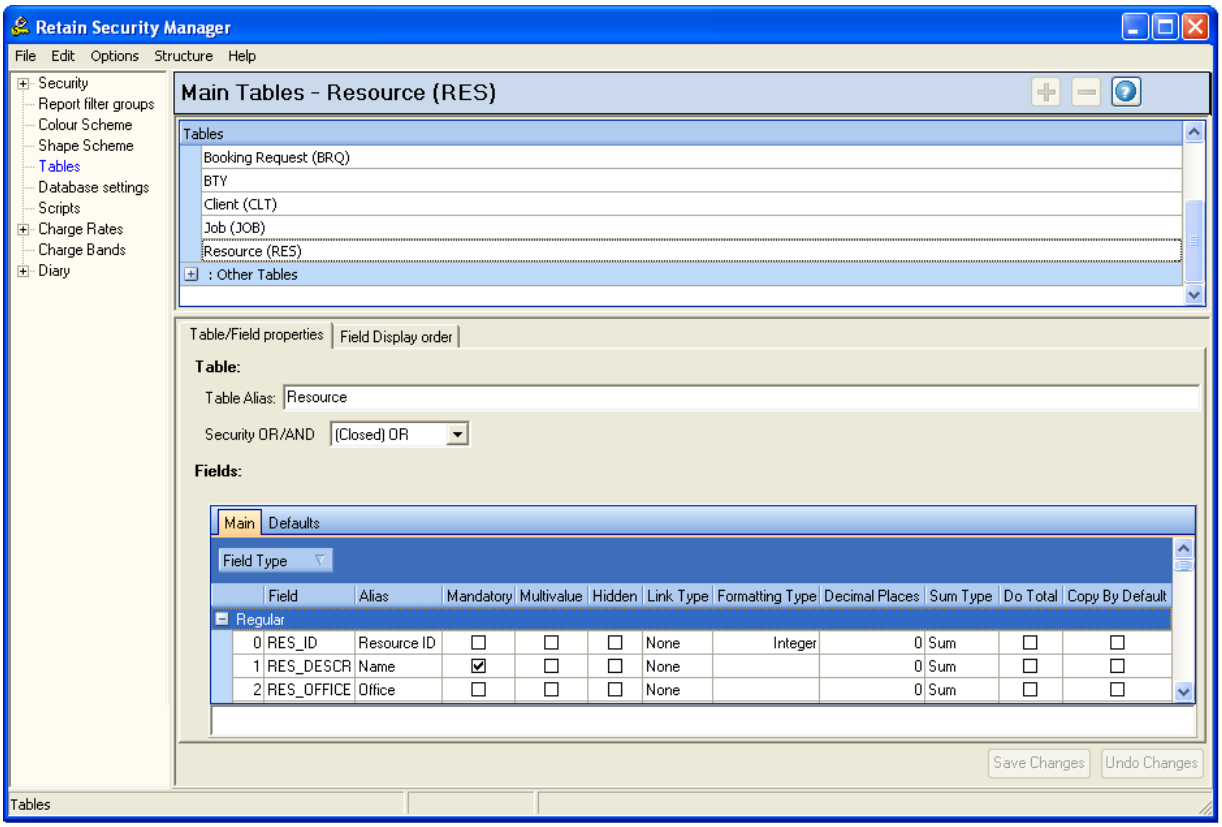
To remove the grouping, simply drag the column header back to its original position.

You can also make notes/comments about each field within the database by entering the description of that field in the editable box at the bottom of the screen:



Main field properties

The 'Main' tab in the 'Fields' section allows you to define the main properties of fields:



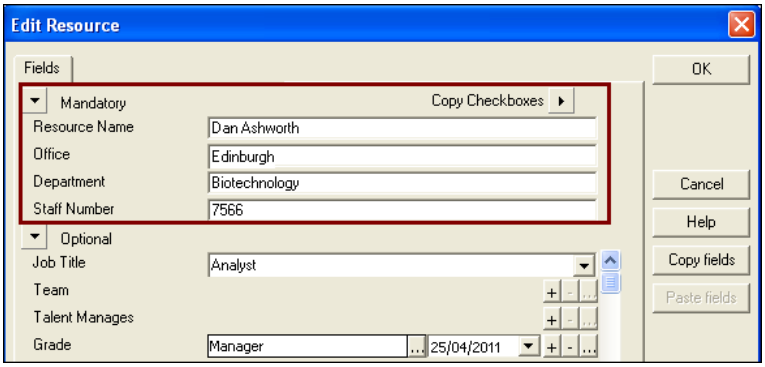
Using the 'Main' tab you can define:

- *Field* – This is the underlying field name stored within the database and cannot be changed.

- *Alias* – This is the field 'name' the users will see throughout Retain. When viewing resource/job records or producing reports, you may want to see more descriptive field names rather than the ones used in the database. For example, BKG_ID field could be replaced with 'Booking ID'. The field alias should be descriptive and reflect the purpose of that particular field. You should also keep it relatively short, since the field alias is also used as the column heading in Retain reports.

Note: If a field has two aliases, one defined in the TLK table and another through Security Manager, the alias specified in Security Manager will be used. If you wish to use the alias from the TLK table, set it to be exactly as the name of the field. For example, if the JOB_CRD_ID field is aliased as 'Analysis Code' within the TLK table but in Security Manager it is 'Charge Code' and you want to revert to 'Analysis Code', set the *Alias* value as JOB_CRD_ID.

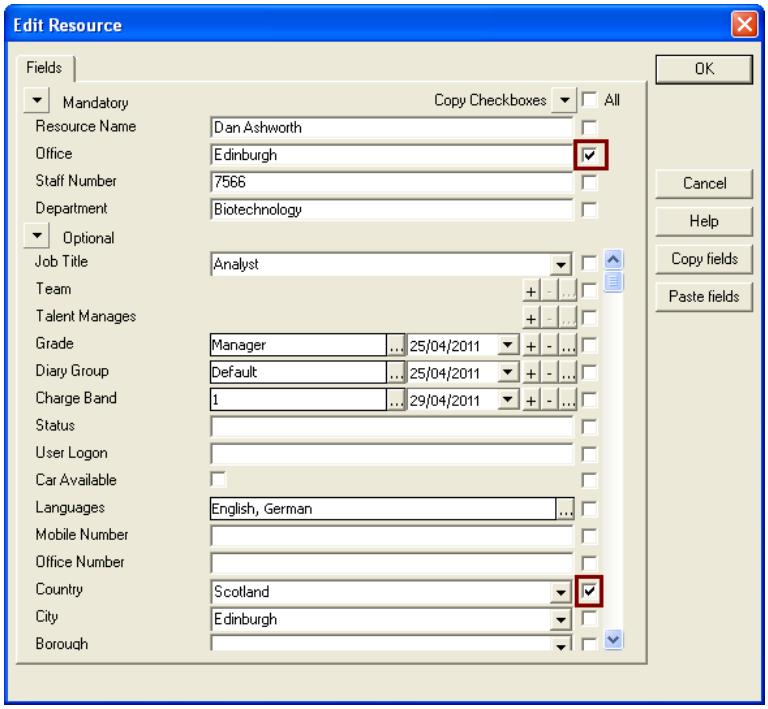
- *Mandatory* – This property defines whether the field is assigned to the 'Mandatory' group within Retain:



A mandatory field must always have a value. Users will receive an error message and will not be able to create or edit the record unless there is a value entered for this field.

- *Multivalue* – This property is used by the Enterprise edition only.
- *Hidden* – By default, all the fields in the database will be visible in Retain. You can hide the fields you do not require by ticking this checkbox. The hidden fields will not be visible in the 'Booking' dialog either.
- *Link Type* – allows you to define a field as being used for a path to a file. By default, all fields are assigned the 'None' value. Applying the 'File' property to a field means that the path to the file will be stored in the database, not the actual file. The paths should be a common path to a file on the server machine.
- *Formatting Type* – allows you to define the numeric formatting of the field enabling you to see the values of certain field differently. The available values are: 'Integer', 'Float', 'Currency' and 'Percentage'. For example, 'Currency' will have the currency sign in the front of the field; 'Percentage' will add the '%' symbol at the end; 'Integer' will display zero decimal places.
- *Decimal Places* – allows you to define the number of decimal places. **Note** that the number specified here will override the value entered through 'Numeric Data Formatting' dialog within Retain Wallchart. If you wish the value specified in Wallchart to be used, enter '-2' as the decimal places value.
- *Sum Type* – you can change the default type of sum of the field to not just 'Sum' but also to 'Average', show 'Minimum' or 'Maximum' or 'Count'. When creating reports, the summation of a numeric column will use this property. For example, in a report on Utilisation you might want to use 'Average', rather than 'Sum', as you would be dealing with percentages.
- *Do Total* – used for the reporting functionality, allows you to specify whether a numeric field should be totalled.
- *Copy By Default* – Certain fields might have to always be used when editing an existing or creating new record. If you wish a certain field to be checked by default when using the 'Copy checkboxes' functionality in Retain, tick this checkbox.

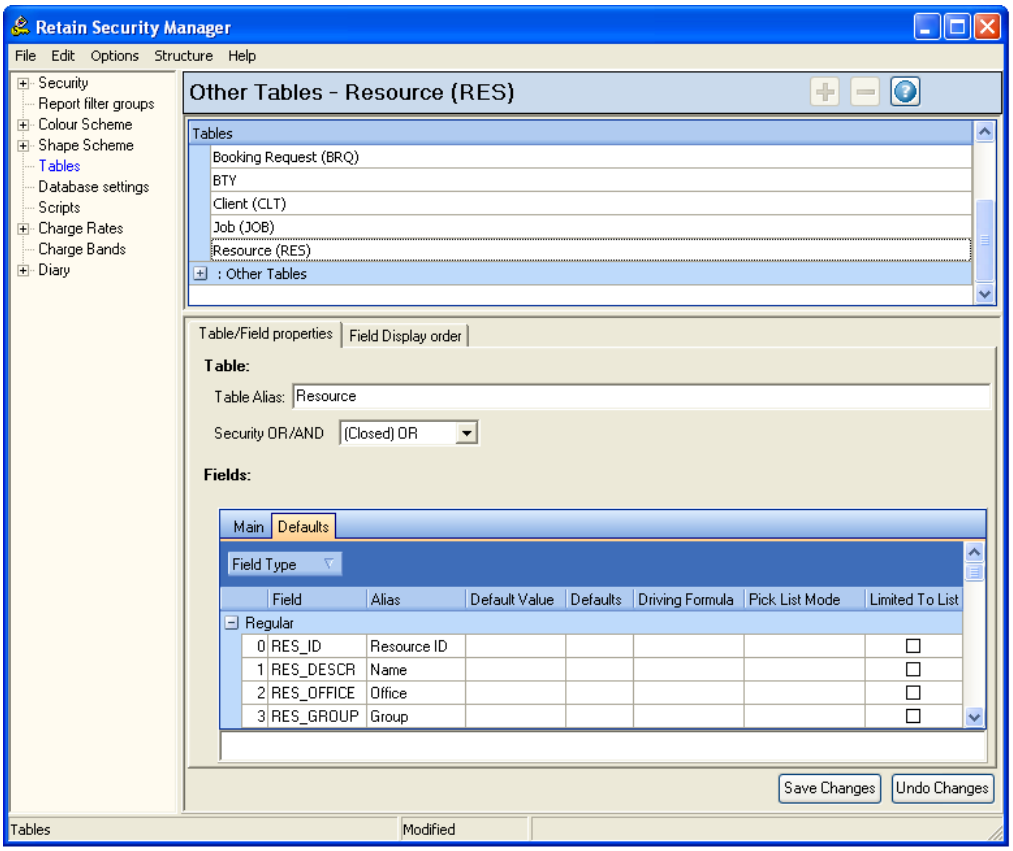
For example, if every time you create a new resource you will be using the Office and Country fields, you can tick the *Copy By Default* checkbox for these two fields and they will automatically be checked in Retain:



Note that if a checkbox for a certain field property is greyed out, it means that it is disabled and can not be applied to that field.

Defaults

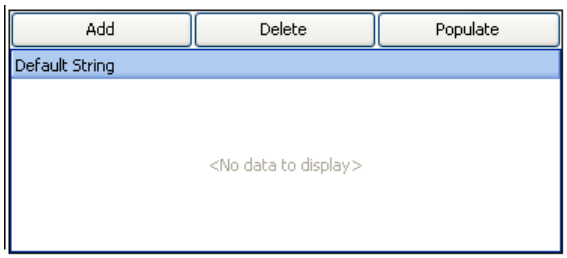
The 'Defaults' tab in the 'Fields' section allows you to define the default values for fields:



Using the 'Defaults' tab you can define:

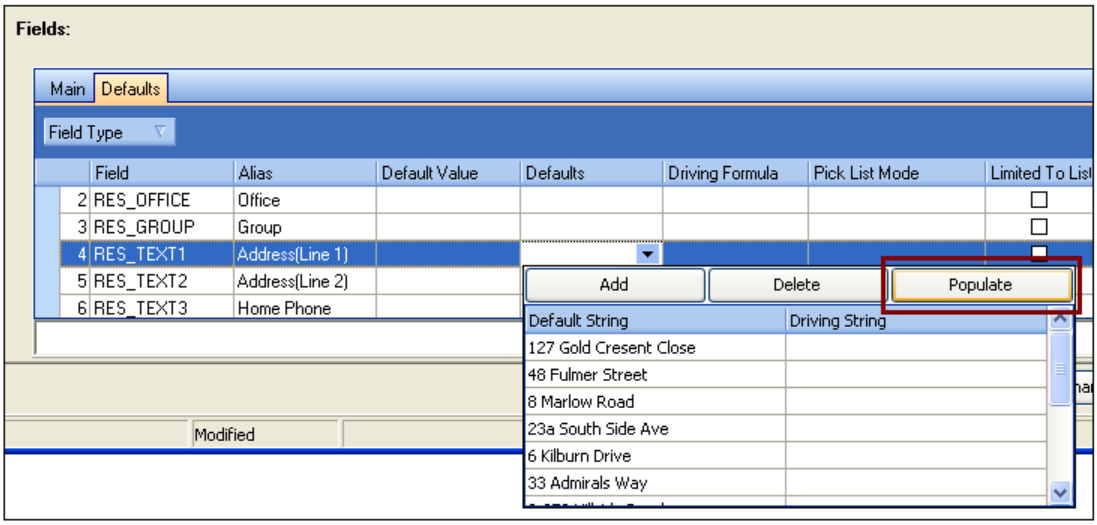
- *Default Value* – This is the value that will be pre-entered for the field when creating a new record in Retain. For example, you can have 'English' selected as the default language for resources.

- *Defaults* – define a list of values for users to select from when adding or editing records. In the pop-up window you can define a predefined list of values for the field:



To add an entry, click on the Add button.
To remove an entry, click on the Delete button.Your selections will then appear in the *Defaults* field. **Note:** You can copy one or more values entered in this window by selecting them (press CTRL+A to select all the values) and pressing CTRL+C. Paste the values as necessary.

You can also **load all of the distinct values stored in the database for the field** as the 'Default String' list by clicking on the Populate button:



- *Pick List Mode* – determine how defaults appear in Retain. The available values are:

  - **Standard:** users can enter any value for a field.

  - **AutoGenerated:** the values users enter through Wallchart will be added to the drop down list of possible values for that field.

Notes:

- To avoid typing errors and synonyms and to conform the data to a standard, use 'AutoGenerated' value from the 'Pick List Mode'. However, be sure to use it sparingly as it has an impact on the performance not only for individual users but also for the whole system.

- 'AutoGenerated' allows the users to create the list of defaults as they go along. This is especially useful if you are initially unsure of all the possible values a field might have.

- Never use 'AutoGenerated' in the Bookings table (RESBOOK or BKG) as it will severely impact the performance of Retain (by generating a list of unique values by searching the whole database each time a booking is made or altered). Also, it is better not to use 'AutoGenerated' for date and note type fields.

- If your entries in the field name or table name aliases do not appear to take effect after stopping and restarting the server, check that they are not being overridden by entries in the *ClntCnfg.ini* file (see Retain Wallchart Technical Implementation Guide for more information).

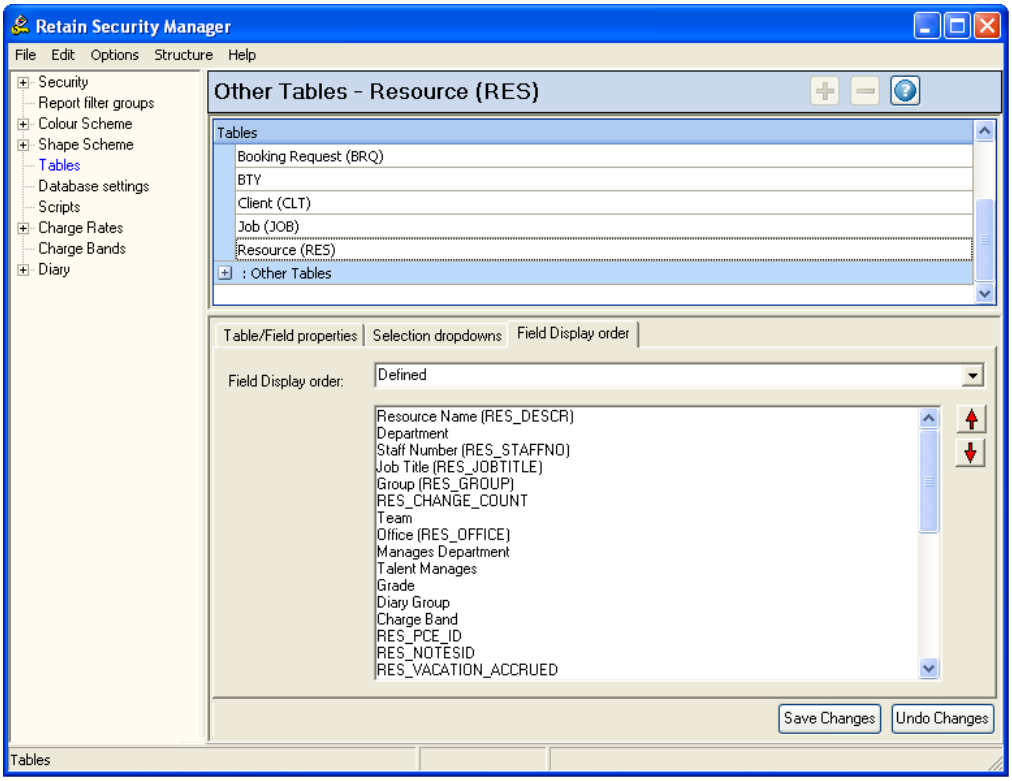
- *Limited to List* – tick this checkbox if you want only the values listed in 'Defaults' column to be available. Users will not be able to enter new values.

The changes will be applied after you select 'Structure-> Effect changes' from the menu or the server is stopped and re-started.

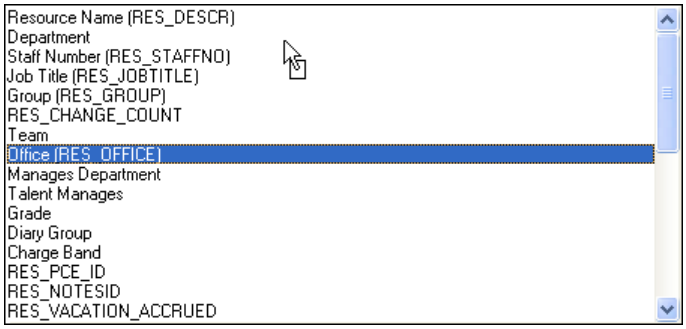
8.3 Field Display Order

From the user's point of view, some fields for a record might be more important than others.

The order in which the fields of a certain table are displayed in Retain can be changed using Retain Security. This is especially useful if there is a large number of fields in a table. Select 'Defined' from the 'Field Display order' drop-down list to change the order of fields:

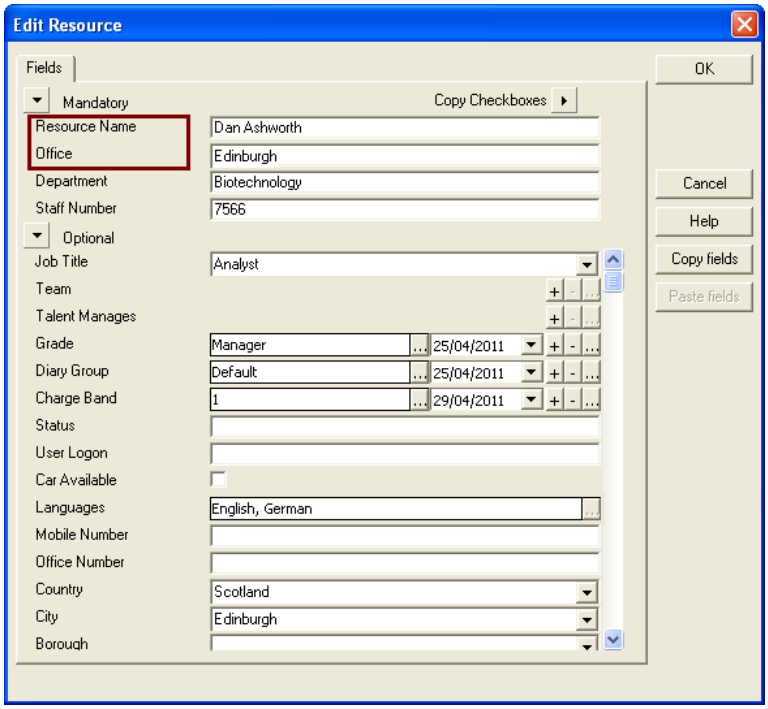


For example, if the resource's office is an important field and you wish to have it displayed right after the resources name, find the 'Office' field in the list, click on it and drag to a required position:



Alternatively, use use the red 'up' and 'down' arrow buttons on the right-hand side.

The office field will be displayed after the resource's name within Retain:

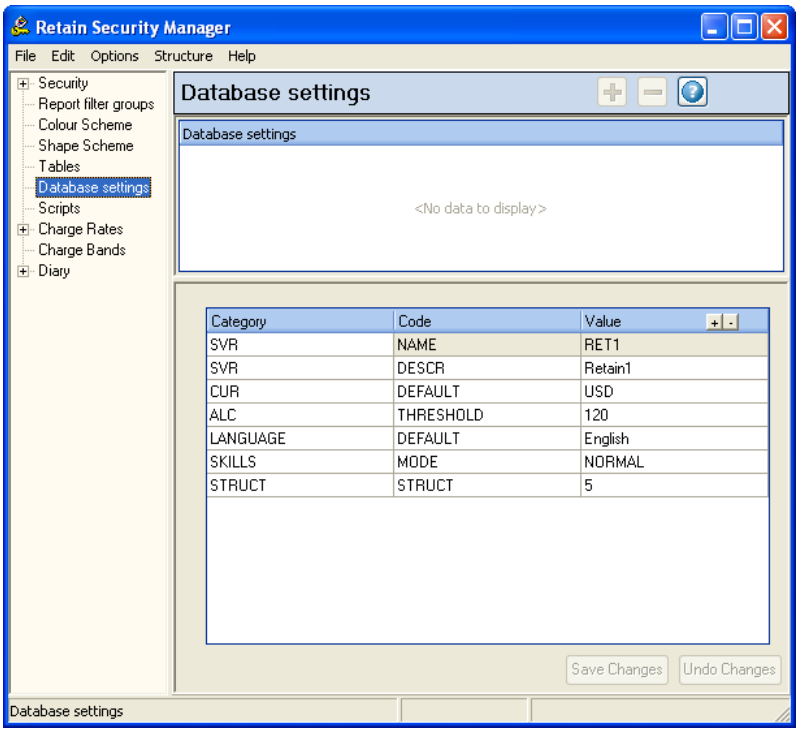


9 Database Settings

9.1 Overview

Using the 'Database Settings' option in Retain Security you can define the database properties.

You should not need to change these settings unless you have more than one database server.



In the event there is more than one server, each of them should have a unique name within the network. By default, the server name is set to RET1. This can be changed, if necessary.

The values for the *Category*, *Code* and *Value* columns represent characteristics associated with the particular database server that you are connecting to.
The *Category* and *Code* values should always be left unchanged.

- SVR NAME – this is the unique Retain Server name for this database.
- SVR DESCR – this is the user-friendly description of the server for use with Retain Enterprise Reports.
- CUR DEFAULT – this is the default currency for this database.
- ALC THRESHOLD – do not change this setting.
- LANGUAGE DEFAULT - this is the default application language.
- SKILLS MODE – do not change this setting.
- STRUCT STRUCT – do not change this setting.

To add more database settings, click the + button to add a row. To delete a row, click on the - button.

9.2 SVR DESCR

- *Category* – SVR
- *Code* – DESCR
- *Value* – enter a description for this database, such as Retain1. This is used in reports as a recognizable identifier, particularly for multi-database reporting. It should also be different from any other database description so that there is no confusion.

9.3 CUR DEFAULT

- *Category* – CUR
- *Code* – DEFAULT
- *Value* – this is the three letter currency code for the default currency for this database, such as GBP or USD.

9.4 ALC THRESHOLD

This setting should not be changed.

- *Category* – ALC
- *Code* – THRESHOLD
- *Value* – the default value is 120.

9.5 LANGUAGE DEFAULT

- *Category* – LANGUAGE
- *Code* – DEFAULT
- *Value* – the default language of the application (English).

9.6 SKILLS MODE

This setting should not be changed.

- *Category* – SKILLS
- *Code* – MODE
- *Value* – the default value is NORMAL.

9.7 STRUCT STRUCT

This setting should not be changed.

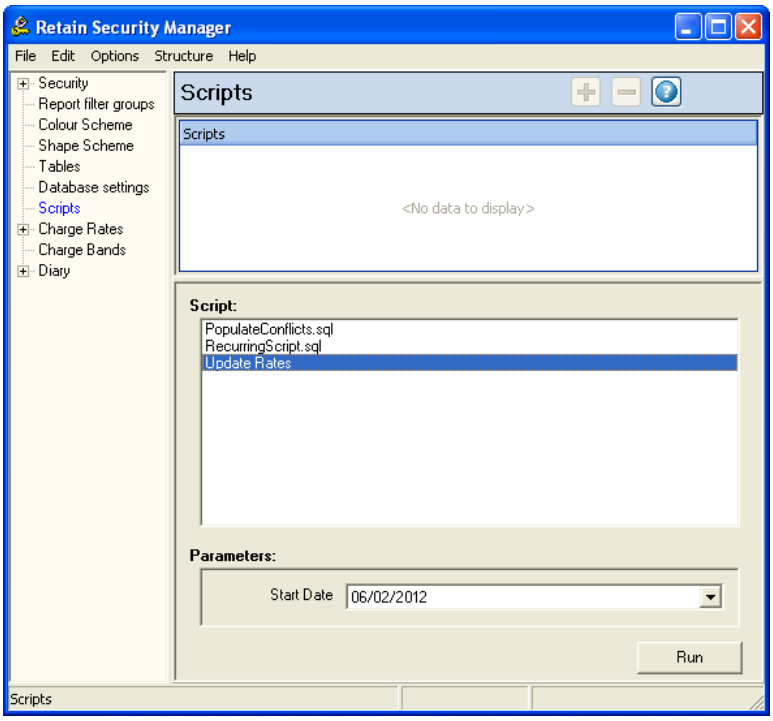
- *Category* – STRUCT
- *Code* – STRUCT
- *Value* – the default value is 5.

10 Scripts

10.1 Script options

If you have the appropriate access rights, the 'Scripts' option in Retain Security allows you to run SQL scripts provided by Retain International Ltd (such as *UpdateBkg.sql*).

This option may be used, for example, to update existing bookings with the changed diary and/or charge rate information (see below). The scripts can be run (although not modified in any way) without the need of database tools or SQL servers:



The scripts are stored in the 'Scripts' sub-folder which can be found in the 'Server' folder. If the sub-folder does not exist, you can create it and put your scripts there. You can also use parameters which allow you to tailor certain scripts.

Updating bookings with the changed time/rate information

Because some data is pre-calculated and stored in the BKG (Booking) table in order to speed up reports and the software in general, sometimes changes to the diary (e.g. the number of working days in a week) and/or charge rates (e.g. values for a resource charge rate) need to be manually 'pushed through' to existing bookings that will be affected.

To update all the existing bookings manually, run the *UpdateBkg.sql* script found in the ‘Server’-> ‘Scripts’ sub-folder See Retain Wallchart Implementation Guide on how to run this script with a different application or set it up as an overnight script.

Note that ALL the existing bookings will be updated. You may therefore want to backup your database before running this script.

11 Charge Rates

11.1 Overview

The 'Charge Rates' option in Retain Security allows you to define the charge rates used in Retain.

To specify charge rates, you will normally have to apply the resource's charge rate to a specific job charge rate. The rate might also depend on the date the booking was made.

By combining these three elements, you can create a charging system which can be as complex or as simple as necessary. Retain's charge rate matrix consists of:

- *resource charge rate* – the hourly rate charged for a resource.
- *job charge rate* – the charge rate description (CRD table) of a job
- *date range* – charge rates in Retain can be defined for one or more date ranges. The date ranges usually reflect periodic adjustments to your organisation's charging structure such as the annual increase in charge rates. At least one date range must be specified. You can add or amend the date ranges as necessary.

Note that the BTY (booking type) and CMP (component) charge rates are currently not used as they are reserved for future expansion of the charge rate matrix.

By default, the *Revenue* charge rate is provided. It is the revenue expected from a job, used for calculated fields related to charging. The *Revenue* rate for a non-chargeable job, for example, would be zero.

Deleting a resource/job charge rate removes it and associated charge rates from the charge rates matrix but does not affect the charge rate descriptions of jobs in the database or the charge rates applied to *existing* bookings of that rate.

Charge rate amendments are applied to all new bookings made in Retain but do not affect any existing bookings.

This is because some data is pre-calculated and stored in the BKG (Booking) table in order to speed up reports and the software in general. Therefore, sometimes changes to charge rates need to be manually 'pushed through' to existing bookings that are affected by the changes.

To apply the changes to the already created bookings, run the *UpdateBkg.sql* script and restart the client application (e.g. Retain Wallchart). See Scripts section for more information.

Related Topics:

Resource Charge Rate
Job Charge Rate

11.2 Resource Charge Rate

Resource charge rate is an hourly rate for a resource working on a specific job.

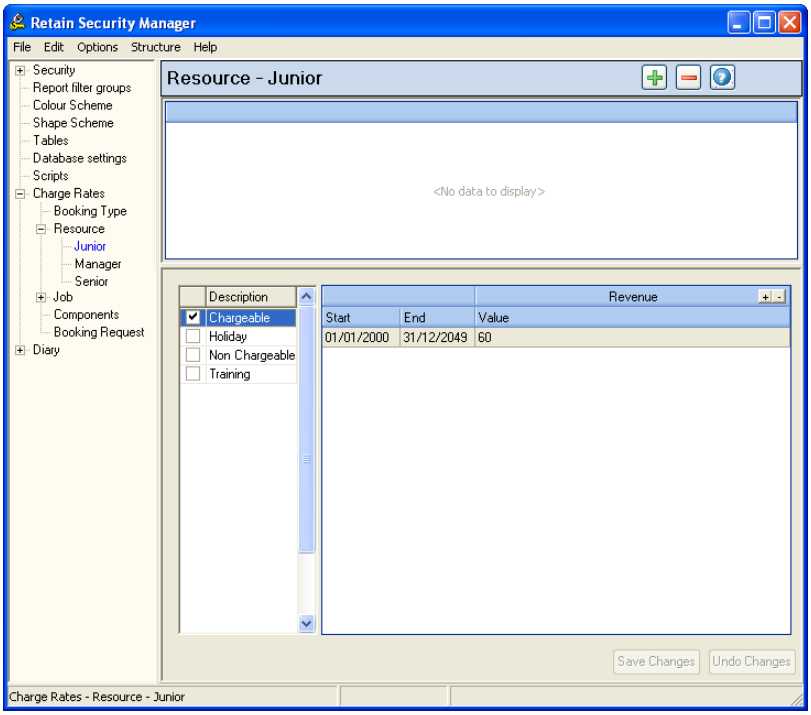
For example, you can have three resource charge rates 'Junior', 'Manager' and 'Senior'. The charge rates for each of these resources will be different for the same job charge rate ('Chargeable' for instance) with 'Senior' having the highest rate.

To create a new charge rate:

- Right-click on 'Resource' and choose 'Add'. Alternatively, select 'Resource' and click on the 

button.

- Enter a name for the new charge rate and click on 'OK':



- *Description* – select a predefined job charge rate that you wish to define.
- *Start* – select the date you wish the charge rate to be valid from.
- *End* – this date is entered automatically and denotes the expiry date for the charge rate.
- *Value* – enter the hourly rate for *Revenue*.

To add another value for a different date range, click on the + button. To delete, click on the - button.

To define a different charge rate description, tick the checkbox for it and enter the values as necessary.

Related Topics:

Job Charge Rate

11.3 Job Charge Rate

Job charge rates are based on the charge rate description (JOB_CRD_ID) of the job.

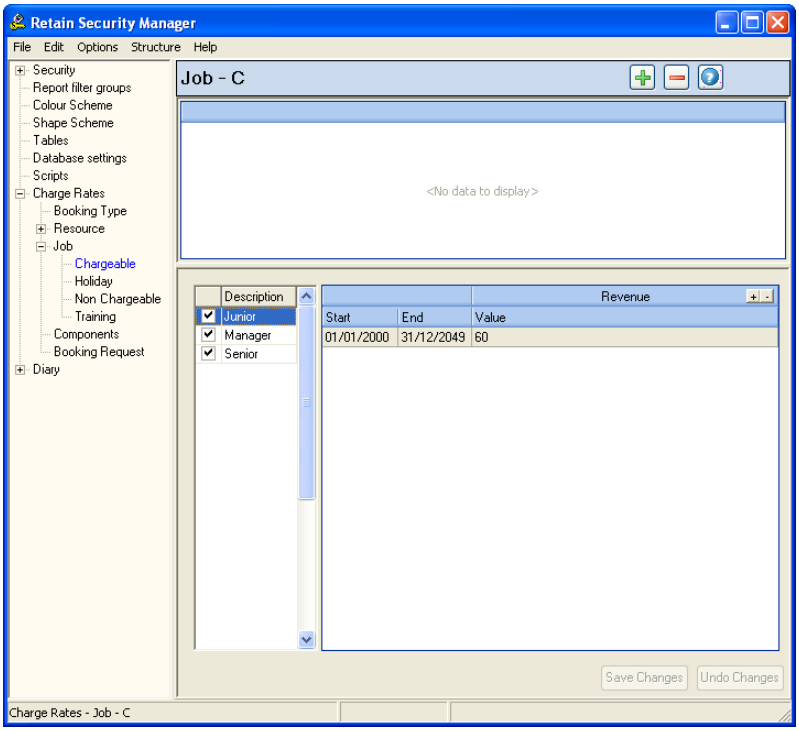
Job charge rate descriptions allow you to set up rates which will be picked up automatically in Retain every time a booking is made against a job with that description, depending on the resource's charge rate.

For example, you may use a job charge rate description code such as 'N' for non-chargeable jobs and 'C' for chargeable jobs.

To create a new charge rate description:

- Right-click on 'Job' and choose 'Add'. Alternatively, select 'Job' and click the button.

- Enter a name for the new charge rate and click 'OK'.



- *Description* – select a predefined resource charge rate that you wish to define.
- *Start* – select the date you wish the charge rate to be valid from.
- *End* – this date is entered automatically and denotes the expiry date for the charge rate.
- *Value* – enter the hourly rate for *Revenue*.

To add another value for a different date range, click on the + button. To delete, click on the - button.

To enter or edit a rate for a different charge rate description, tick the checkbox for that description and enter the necessary charge rates.

Related Topics:

Resource Charge Rate

12 Charge Bands

The 'Charge Bands' option in Retain Security allows you to define which charge rates will be included in the utilisation and availability calculations.

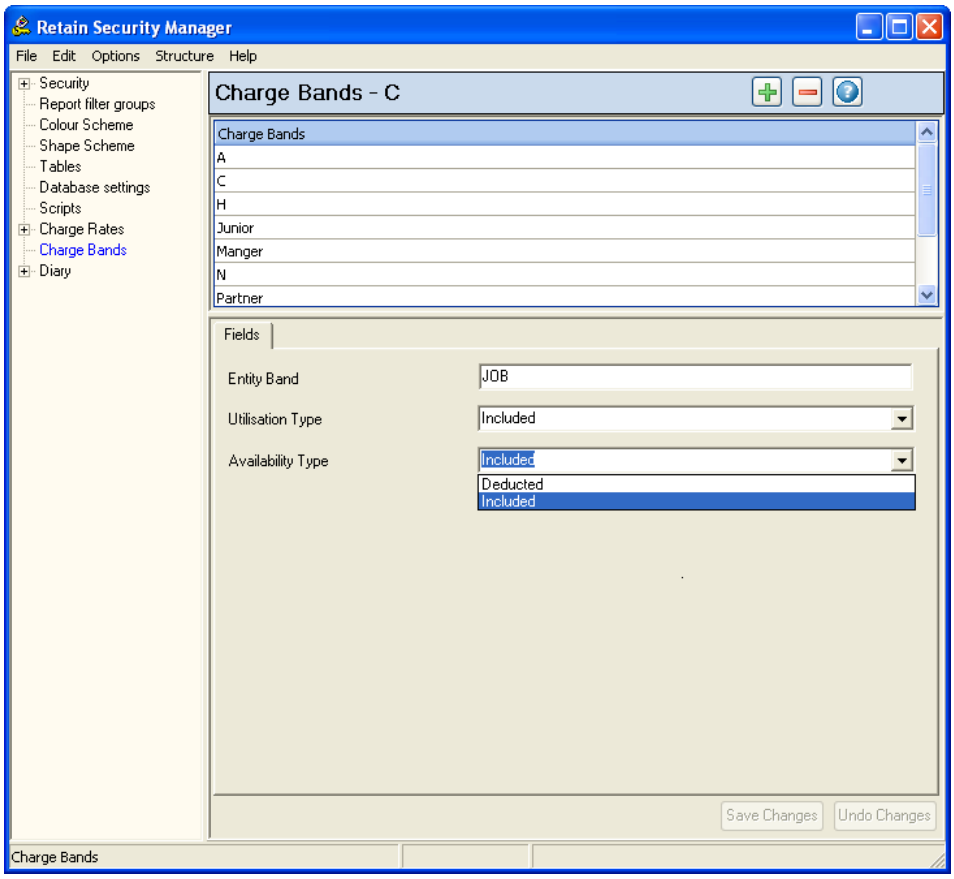
The possible values are:

- *Included: b*ookings linked to jobs having this charge band will count towards utilisation and availability.
- *Excluded (for utilisation only):* bookings linked to jobs having this charge band will *not* count towards utilisation.
- *Deducted:* bookings linked to jobs having this charge band will not count towards utilised time but it will be considered for utilisation and availability.
- *Blank (no value specified):* utilisation is considered as *excluded* and availability as *included*.

By default, certain jobs are already assigned a utilisation type:

- C - included
- H and T - deducted
- N - excluded

To assign a utilisation/availability type to a charge band, select it from the list of possible bands and choose the required value from the appropriate drop-down list:



Once finished, click on the Save Changes button.

13 Diary

13.1 Overview

The 'Diary' option in Retain Security Manager allows you to define working days, weeks and years:

- *Days* – the start and end of a working day; the amount of standard and emergency working time during the day.
- *Weeks* – the reference date for the start of the working week; the number of days in the weekly working pattern and the type of day (e.g. normal working day, weekend) defined within *Days*.
- *Diary* – the standard week for the current year, the non-standard days that occur in the year (e.g. bank holidays) and the non-standard weeks in the year (e.g. dates where the diary is different such as planned holidays).

Notes:

- You should first of all set up the days, followed by weeks and only then create a diary.
- Because some data is pre-calculated and stored in the BKG (Booking) table in order to speed up reports and the software in general, sometimes changes to the diary (e.g. the number of working days in a week) need to be manually 'pushed through' to existing bookings that will be affected.

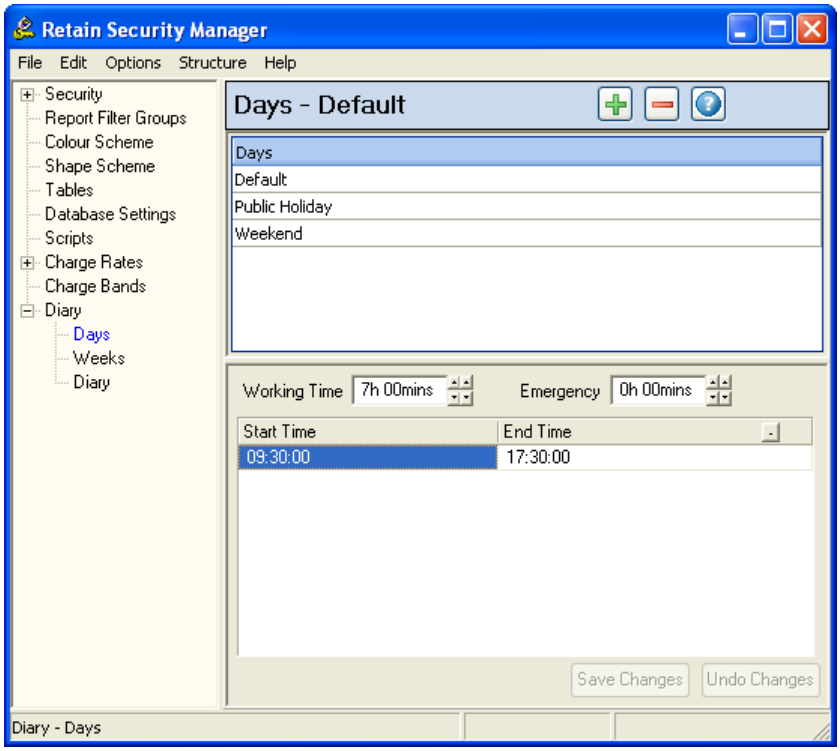
  To manually apply diary changes to all the existing bookings, run the *UpdateBkg.sql* script and restart the client application (e.g. Retain Wallchart).
  See Scripts section for more information.

13.2 Days

Days define the start/end time of a working day as well as emergency working time.

To create a new day:

- Right-click on the 'Days' and choose 'Add' or select 'Days' then click on the button.
- Enter a name for the new day and click on 'OK':



You can then set up the working and emergency times for that day.

- *Working time* – enter the standard working time by either typing in the hours and minutes or clicking on the up and down arrows. It is easier to enter four digits, e.g. '0830' rather than '830'. If you position the cursor on the second digit, you can enter three digits, e.g. '830'.
- *Emergency* – enter the number of emergency hours you would expect a resource to work by either typing it in or using the up and down arrows.
- *Start time* – type in or use the up and down arrow keys to enter the start time for a work day.
- *End time* – type in or use the up and down arrow keys to enter the normal end time for a work day.

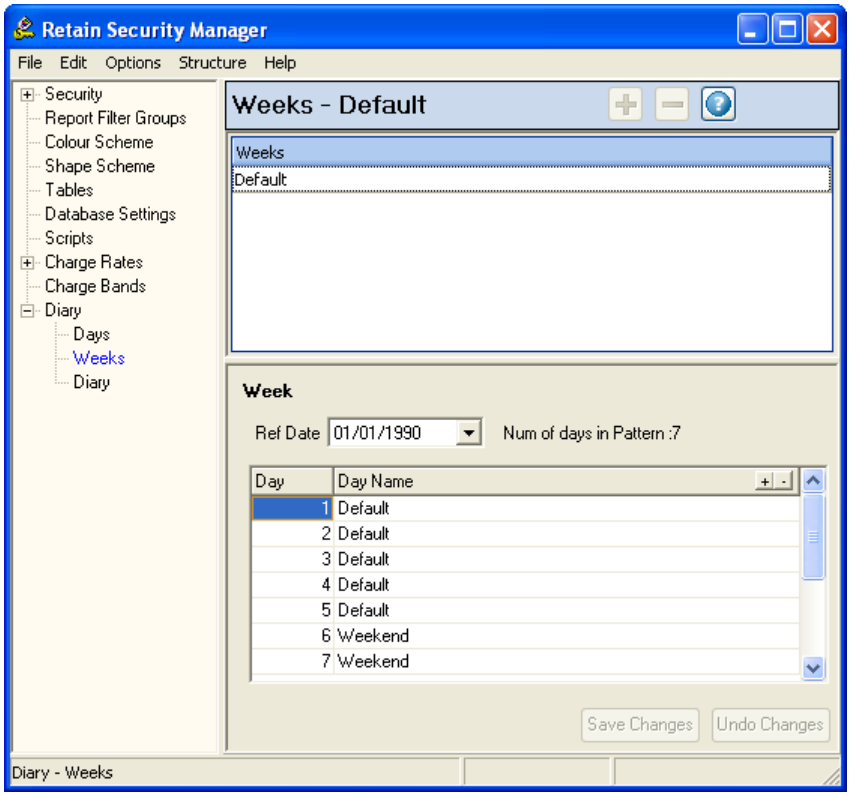
To delete the start and end times, click on the button.

To rename a day, right-click on it and select 'Rename'.

If you want to remove a day, right-click on it and select 'Delete'. **Note** that you will not be able to delete the days that are being used in a week.

13.3 Weeks

Weeks represent the number and type of days in the weekly working pattern and the type of day:



You can set up the parameters for that week.

- *Ref Date* – this is the day number reference. For example, 01/01/1990 is Monday 1st January 1990 and means that day 1 is a Monday. Unless you have specific reason to change it, it is recommended that you leave the *Ref Date* set to 01/01/1990. If you want to change it, either click on the date and type in the values you want, or click on the drop-down list and select the required date.

- *Num Days in Pattern* – this is the number of days you specify for the working pattern of this diary. To add days click on the + button to the right of the day name title. To remove days click on the - button.

- *Day* – the day of the week. By default, 1 means Monday, 2 is Tuesday, and so on.

- *Day Name* – start typing in the name of the predefined day that will be used or select it from the drop down list.

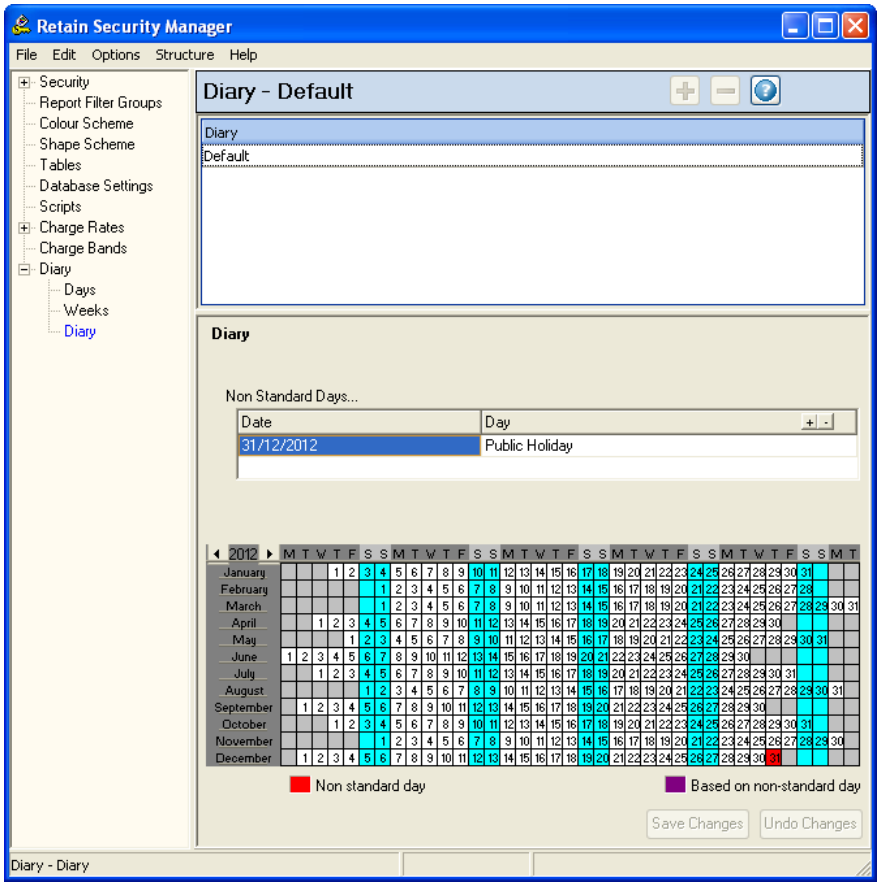
To delete a day, click on the - button.

To rename a week, right-click on it and select 'Rename'.

If you want to remove a week, right-click on it and select 'Delete'. **Note** that you will not be able to delete the weeks that are being used in a diary.

13.4 Diary

Diary is the set of weeks defined for a year:



You can define a default year with all the bank holidays (non-standard days).

- *Non Standard Days* – to add a non-standard day (e.g. a bank holiday), click on the *Date* field and select the date from the calendar or type it in. To specify the day, click on the *Day* field and start typing in the name and select from the drop-down list.

To add another non standard day or week, click on the + button. To remove, select it and click on the - button. Non standard days will be marked in red and weeks in green in the calendar below.

14 Appendices

14.1 Additional Components

Retain is a client-server application. The components of the software are:

Server

- Retain Server – server application that provides an interface to the chosen database platform.

Client

Core modules

- Retain Wallchart – main resource planning application for viewing and manipulating resource and job allocations. It also has an internal reporting tool that allows you to create and run reports.
- Retain Security Manager – administration tool for defining user security access rights and general management functions.

Optional modules

- Booking Requests – provides a full request and approval system including amendments, notifications and what-if functions.
- Retain Skills – captures and manages resources' skills.
- Enterprise Reports – reporting module with full report designer that provides the ability to both design complex reports and report across several databases.
- Retain Time – provides a time-sheet system used for recording and managing time sheets.
- Retain Importer – transfers or updates data from an external source into a Retain database.
- Retain Notify – a companion module to Booking Requests for emailing notifications of changes in booking requests to resources and requesters.

14.2 Configuration Files

All the client software will normally be installed into the same application directory and will share common configuration files:

BkgDialog.ini	Defines the 'Booking' dialog settings, used by Retain Wallchart only.
ClntCnfg.in	Defines general client settings.
Retaine.ini	Defines application specific settings.
Servers.ini	Defines the location of Retain Servers.
SvrCnfg.ini	Defines the Retain Server settings.

These will normally be configured on a test machine initially and then subsequently distributed to all client machines as part of the standard configuration. Retain notebooks and report files may also be distributed as part of the standard installation. Alternatively, can be stored in a shared directory on the file server.

bkgDialog.ini

Using the *bkgDialog.ini* you can configure the 'Booking' dialog. You can:

- add/remove tabs;
- reorganise and add/remove fields;
- define controls for fields (e.g. checkboxes, drop down lists, etc.);
- rename field aliases and much more.

bkgDialog.ini can be found in the same folder as your Retain Wallchart executable. This file has to be present in order to see and use the 'Booking' dialog (a warning message will appear if a *bkgDialog.ini* is missing on start-up).

[General]

- DefaultWidth=440
  DefaultHeight=400

These settings define the default size of the 'Booking' dialog when it is opened for the first time. The width and height is defined in pixels. If these settings are not applied, the dimensions of the dialog will be 800x600 pixels.

- NTABS=2

This setting determines the number of tabs in the 'Booking' dialog. In this case, two tabs will be present.

- SwitchWidth=400

This setting reorganises the layout of the 'Booking' dialog when the dialog is reduced to to a certain width (in this case 400 pixels). If the user reduces the width below this threshold, the labels will appear above their respective components rather than to their left. This is especially useful when the dialog is 'docked'.

- MinWidth=700

This setting defines the minimal width of the 'Booking' dialog. In this case, the minimum width of the dialog will be restricted to 700 pixels. However, if you 'dock' the 'Booking' dialog and then remove it from the dockable pane, you will be able to resize the dialog beyond this threshold.

- MinHeight=500

This setting defines the minimal height of the 'Booking' dialog. In this case, the minimum height of the dialog will be restricted to 500 pixels. However, if you 'dock' the 'Booking' dialog and then remove it from the dockable pane, you will be able to resize the dialog beyond this threshold.

- UseColorScheme=1

If set to 1, this setting will colour the background of each value in the relative drop down list depending on the currently selected colour scheme. For example, if the current colour scheme is based on booking type and you have a 'Booking Type' field in the 'Booking' dialog, the backgrounds for the values of that field will be coloured accordingly. The default value is 1 (the setting is applied).

- AskRefreshRepository=0

This setting defines whether a confirmation dialog appears or not when you edit a booking graphically. If set to 0 or the setting does not exist in the *bkgDialog.ini*, the dialog is not shown. If the value is set to 1, the confirmation dialog will be displayed.

- UseOldBkgDialog=1

If set to 1, allows you to revert to the old style 'Booking' dialog.

- AlwaysOpenUndocked=0

If set to 1, the 'Booking' dialog will always be opened undocked, regardless of whether it was docked or not before closing.

- UseSeparateCloseBtn=0

If set to 1, adds an additional 'Close' button to the 'Booking' dialog.

- FeedbackMinHeight=120

This setting defines the minimal size of the feedback window in the 'Booking' dialog.

[Tab1]

You can have a number of tabs within the 'Booking' dialog (see the *NTABS* setting above). The settings for each tab should be defined within the appropriate sections: the settings for the first tab should be within [Tab1] section, the second under [Tab2] section and so on.

- Name=Main

This setting defines the name of the tab as it will be displayed within the 'Booking' dialog. In this case, the tab will be called 'Main'.

- HelpId=301

This setting points to the relevant section within the user help file and should not be changed.

- NFields=6

This setting defines the number of fields within the tab (in this case six).

- NCols=1

This setting defines the number of columns within the tab (in this case one).

- NRows=7

This setting defines the number of rows within the tab (in this case seven).

- Row1Resizable=1

If set to 1, this setting makes that row (in this case row 1) resizable, allowing you to expand and contract it. Normally, this functionality will be disabled (value set to 0) for most rows.

- Column1Resizable=1

If set to 1, this setting makes that column (in this case column 1) resizable, allowing you to expand and contract it. Normally, this functionality will be disabled (value set to 0) for most columns.

- MarginSize=5

This setting defines the size of the margin between the rows and columns within the tab. In this case, it will be 5 pixels.

- CaptionColHeight=30

This setting defines the height of the caption for the field label. In this case, it will be 30 pixels.

- CaptionColSize=80

This setting defines the width of the caption for the field label. In this case, it will be 80 pixels.

- Row1SizeType=ssPercent
  Row1SizeValue=15

These two settings define the size of the row when the dialog is resized. You need to define both the size type and value.
If the row size type is set to 'ssPercent', the size of the row will be calculated as a percentage. In this example, the size of the row will remain 15% when the 'Booking' dialog is resized. You can also set the row size type to 'ssAbsolute' if you wish the size of the row to be calculated in pixels and remain of fixed size when the dialog is resized.

Note that the first row within the tab is called 'Row1', the second 'Row2' and so on.

Field Properties

For each field within the tab (Field1, Field2, etc.), define the following settings:

- Field1=BKG_RES_ID

This setting defines the field which the control will represent and allow to change. In this case, the first field within the tab will be based on the BKG_RES_ID.

Note: If the user does not have appropriate security rights to view a certain field (E.g. BKG_JAS_ID), that field will not be visible to them in the 'Booking' dialog, regardless of this setting.

- Field1NRows=1

The number of rows within the cell you are working in. In this case, the first field will have one row.

- Field1NCols=1

The number of columns within the cell you are working in. In this case, the first field will have one column.

- Field1Row1SizeType=ssPercent
  Field1Row1SizeValue=100

These two settings define the width of the field with regards to the size of a row. You need to define both the size type and value.
If the row size type is set to 'ssPercent', the width of the field will be calculated as a percentage. In this case, the first field will take up 100% of the first row's width. You can also set the row size type to 'ssAbsolute' if you wish the width of the field to be calculated in pixels instead.

- Field1Col1SizeType=ssPercent
  Field1Col1SizeValue=100

These two settings define the height of the field with regards to the size of a column. You need to define both the size type and value.
If the column size type is set to 'ssPercent', the height of the field will be calculated as a percentage. In this case, the first field will take up 100% of the first row's height. You can also set the column size type to 'ssAbsolute' if you wish the height of the field to be calculated in pixels instead.

- Field1LabelLayout=tlTop

This setting defines the position of the field label. The possible values are: 'tlCenter' (places the label at the center of the field); 'tlTop' (the top of the field); 'tlBottom' (the bottom of the field). **Note:** This setting can only have one value.

- Field1HideLabel=0

This setting defines the visibility of the field label within the 'Booking' dialog. If set to 0, the label is shown and if set to 1, the label is hidden.

- Field1Border=Left,Right,Top,Bottom

This setting allows you to add a border to the field. You can define the position of the border with these four values: 'Left', 'Right', 'Top' and 'Bottom'. Use all four values to visually frame the field.

- Field1MinSize=100,20

This setting allows you to define the minimum size of each field. The first value is the width and the second is the height in pixels.

Field Control Types

- Field1Control1=

This setting defines which type of control will be displayed to the user for that field.

The possible values are:

- Checkbox
Adds a checkbox for the field.

- CustomRates
Adds the Revenue and Cost charge rates and ability to edit them.

- DateTime
Adds the following booking date and time controls: 'Start', 'End', 'Loading' and 'Time'.

- DropDownControl
Lists the database values for the field in a drop-down list. This control is used with linked fields.

- GridControl
Lists all the values for that field in a list display.

- TEXT
Adds an editable text box for the field.

- Blank
Adds a blank space instead of a control. Should normally be used with the *Field1NControls* setting only.

- FILELINK
Adds a control that allows storing a file path to the database (but not the file itself). The file can be opened if the file path is valid and you click on the button. **Note:** You will need to set the field's 'Link Type' to 'File' within Retain Security Manager.

- STANDARDDROPDOWN
Lists the default values for the field in a drop-down list. The default values need to be specified in Retain Security Manager.

- DATECONTROL
Adds a date picker control for the field.

- Field1Control1ListAll=1

This setting is applied to fields with the *DropDownControl* only. If set to 1, it displays all the values for the field when the drop-down list is open. The setting should only be applied to fields with less than 5,000 values. The default value is 0, i.e. the setting is not applied.

- Field1Control1AddButton=1

If set to 1, the 'Add' button which allows you to add a new entity (e.g. resource, job, component - depending on the *Field1* value) is added for the field. In this case, the first field will have an add button which will allow you to create a new resource and then select it when making a booking. If you do not wish to have the 'Add' button for the field, set the value to 0.

- Field1NControls=2

This setting allows you to define the number of controls for a field. You would normally only use this setting with one of the controls having the *Blank* value:
Field1Control1=Blank (and the other control being of any other type). If you define two controls but only specify one of them, the *TEXT* value will be used for the undefined control.

Field Control Properties

- Field1Control1Properties=

This setting defines the properties of the controls for the field. A number of possible values can be assigned to this setting.
For example, Field1Control1Properties=MultiLines,HorizontalScrollBar,VerticalScrollBar will allow multiple lines as well as horizontal and vertical scroll bars for the second field. You can apply such values for a 'Notes' field, for instance.

Note: When using several values for the same field control you need to separate them with commas (',').

The possible values are:

- MultiLines
If present, allows the field to span multiple text lines.

- HorizontalScrollBar
If present, adds a horizontal scroll bar for the field.

- VerticalScrollBar
If present, adds a vertical scroll bar for the field.

-ShowAmPm
If present, adds the 'Book Partial Day' menu but only if the *ShowTimeActionMenu* value is also present. **Note:** This menu appears only when the selected booking starts and ends on the same day.

- ShowSeparateDateTimeControls
If present, adds two different controls for date and time. If not present, only one control is used.

-ShowAlwaysTime
This value should be used only when the *ShowSeparateDateTimeControls* is not present.
Allows the time to always be be displayed in the 'Start' and 'End' date controls. If this value is not used, the time will be shown and editable only when the
'Book partial day' checkbox is ticked.

- ShowNonWork
If present, adds the 'Include non-working days' checkbox.

- ShowNonDiary
If present, adds the 'Book partial day' checkbox.

- ShowTimeActionMenu
If present, adds the 'Move and Change' menu.

For the *DateTime* field controls you can define the alias for the fields using the following syntax: Alias|BKG_FIELD_NAME|NEW_ALIAS. For example: Field1Control1Properties=ShowNonWork,Alias|BKG_NON_WORK|Include~non-working~days. **Note:** Use ~ to display a space between words within the alias.

- applyWallchartSelection
If present, reflects the selection currently applied to Wallchart to resources and jobs. Only applicable to *DropDownControl* and *GridControl* types of control for the BKG_RES_ID and BKG_JOB_ID fields.

- IncSearchColor
When using *GridControl* field controls, the matching text is highlighted as you type it in. This setting defines the background colour of the highlighted text through the following syntax: IncSearchColor|#Red#|#Green#|#Blue# where #Red#, #Green# and #Blue# are replaced by the required values. For example, to set the background colour to yellow, use Red=255, Green=255, Blue=0: Field1Control1Properties=IncSearchColor|255|255|0.

- WordWrap
If present, enables word wrapping for the *TEXT* field controls. **Note:** the horizontal scroll bar is not shown when this value is used.

Attachments tab

To enable attachments functionality within the ‘Booking’ dialog, follow these steps:

1. Increase the tab number by one:
[General]
NTABS

For example, if you have two tabs in the ‘Booking’ dialog, change NTABS=2 to NTABS=3.

2. Change the [TabN] setting by replacing 'N' with the appropriate number, depending on the setting above.

For example, if you have two tabs, change [TabN] to [Tab3].

3. Save the changes. If you have Wallchart running, you do not need to restart it, simply right-click within the ‘Booking’ dialog and choose ‘Reset Dimensions’.

CIntCnfg.ini

This configuration file resides on the client machines.

[CACHE]

- **TABLENAME=CACHE SIZE (number of records)**

The cache settings are normally not used (the cache is unlimited), although might be set for the BKG table only.

[CONNECT]

- **ProgressBar**

When set to 1, Retain shows a progress bar while it is connecting.

[SECURITY]

- **CONFIRMCHANGES**

If set to 1, the user will be asked if he/she wants to save the changes made using Retain Security. If set to 0, the changes will be saved automatically. The default value is 0.

[log]

- **writelog**

If set to 2, provides useful debugging information when Retain is not working or is running particularly slowly.

[ScenarioManager]

- **AlwaysShowFilterArrow**

When set to 1, the filter arrow next to column names in the Scenario Manager is always shown. When set to 0, the filter arrow is shown only when you move the cursor over the column name.

- **ShowBkgFiltering**

When set to 1, the filtering for scenario bookings in the Scenario Manager is enabled.

- **BookingsViewSyncMode**

When set to 1, the same filtering and settings are shown for all of the scenario bookings within the Scenario Manager. When set to 0, each set of scenario bookings has a separate filtering and settings.

- **UnselectAllAtStart**

When set to 1, all the scenarios in the Scenario Manager are deselected by default.

- **ShowCustomFiltering**

When set to 1, shows the custom filters in the Scenario Manager. The default value is 1.

[DropDown]

- **VisibleCompareMechanisms**

This setting defines which linked field operators are enabled. The default value is 'Like,LikeCaseSensitive'.

To enable multiple operators, separate them by a comma. The possible values are:

- Like

- LikeCaseSensitive

- Equals

- NotEquals

- GreaterThan

- LessThan

- GreaterEquals

- LessEquals

[Wallchart]

- **DisableDefaultNotebook**

When set to 1, disables the Default notebook feature within Wallchart. The default value is 0, that is the 'Save As Default Notebook' option is enabled.

[SUPPORT]

- **EMAIL=alternativesupportemail@domain.com**

This setting allows you to specify an e-mail address that will be used by Retain Error Submitter to send the error logs.

Retaine.ini

Retaine.ini file defines the various settings for Retain applications.

If it does not exist, gets created automatically within the same folder as your Retain executables.

[Attributes]

- Main=Achieved

The value of this setting should match the name of the attribute level used within the deployment (see the ATB table). The default value is 'Achieved' which corresponds to 'Achieved/Wanted' attribute levels. You can also use the 'User' value which corresponds to 'User/Goal' levels.

The following Retain Wallchart settings require manual set-up

- [Overallocation]
  DoTest=1
  Threshold=100

This setting enables the over-allocation test. A warning will be displayed when moving or resizing a booking in such a way that the total loading increases above the specified threshold. In this example, a warning will be displayed if loading equals to more than 100%. **Note** that when making a new booking, this threshold will not be applied.

[Language]

- Codepage=1

If set to 1, the font scripts are used according to your regional settings.

[Security_Maintables]

This section allows you to define the tables which will be grouped as 'Main' within Retain Security Manager. The syntax is: [table name]=1. For example:

RES=1
JOB=1
BKG=1
CMP=1
JAS=1

To display these tables in the 'Main' group in Security Manager, right-click on the Tables node and select 'Group by-> Common Tables'.

[SecurityOutline]

This section of the file defines settings for Retain Security.

[Wallchart]

This section defines general Wallchart settings.

- OldStyleHistoryControl

If set to 1, this setting allows the user to see all the history values when not in edit mode. When set to 0, presents the user with only the current value when not in edit mode.

- BypassDialogConCheck

If set to 1, bypasses the connection check done by the 'Edit/View Record' dialog when the user clicks on 'OK'.

Wallchart report settings

You can use the special features of fields to control how numeric fields are totalled in Retain Wallchart reporting.

By default, Retain will sum all numeric fields:

- [RETAIN TABLENAME (e.g. Booking, Resource, Job, Assignment or Client)]
  FIELDNAME_Special=Value

The possible values are:

256 - Do not total
512 - Average total

For example:

To not total booking IDs:
[Booking]
BKG_ID_Special=256

To show average IQ values:
[Resource]
RES_IQ_Special=512

View selections

You can enter view selections which will restrict the view of the data seen by the user. Care should be taken when setting up these selections. They also affect the booking request interface, and will restrict the booking requests displayed in the admin queue to those containing resources in the view selection.

The booking request interface can have its own specific views set up which override the default view selections.

For example:

Booking Request view selection overrides the main view selection, if present:
[Resource]
ViewSelection=RES_OFFICE='Local'
BRViewSelection=RES_SECURITY='A'
DDViewSelection=RES_SECURITY='A' or RES_SECURITY='B'

Limits view to jobs table:
[Job]
ViewSelection=JOB_COUNTRY='UK'
BRViewSelection=JOB_SECURITY='A'

[Booking]
ViewSelection=BKG_BTY_ID=1

ViewSelection relates to the selection used by Retain and Booking Requests.

This can be overwritten by 2 additional items:

BRViewSelection relates to the items available in Booking Requests.

DDViewSelection relates to the drop down lists in Retain Wallchart. This is particularly relevant to the 'Booking' dialog, where you may want to book against a job which has yet to appear elsewhere in Retain. You may need to set the condition to 1=1 if you want the drop downs to list all items, where the ViewSelection is set to be more restrictive.

- [BookingRequests]
  resDDCalc=DGAvalTme
  resDDCalcTitle=Avail Selection

This setting allows you to add additional Booking Request search fields. In this case, an additional column which allows you to search by availability when adding resources to a job based request will be added.

Note that the additional column only appears when a date range is defined.

Table Alias

Under the section for the relevant table, e.g [Resource], put

- tablename=individual

This will alias the RES table to be displayed as 'individual' (rather than the default 'resource') within Retain Wallchart.

Servers.ini

This configuration file resides on the client machines. It contains information required by the Retain client to connect to one or more Retain Servers. The syntax for this file is as follows:

[SERVER_ALIAS]

London=Server
Paris=Server

This section contains the list of servers that will be visible in the drop down list when users connect to the database through any Retain client application.

For each server listed above, the connection information is provided. Each entry can have several servers linked to it:

```
[London_1]
 ;Main server
 Server1 = 10.20.30.8:8880

[London_2]
 ;Backup server
 Server1 = 10.44.236.184:8760

[Paris_1]
 ;Multiple servers selected at random to spread the load
 Server1 = 54.263.156.98:8880
 Server2 = 10.144.36.14:8960
 Server3 = 246.23.164.87:8900
```

Each group requires a minimum of one server and one port number. There are two different ways of defining multiple alternative servers for a particular site.

In the example above, the London site has a main server and a backup server that should be used in the order displayed. The order is defined by numbering the groups using the above syntax. In other words, 10.20.30.8:8880 will always be tried first but if it fails, the client will try 10.44.236.184:8760 next.

If more than one server is specified on a given number for a given site, Retain will randomly select one of the servers to connect to and if unsuccessful, try the subsequent ones. This random selection balances the load if there are multiple Windows NT servers pointing to the same database.

SvrCnfg.ini

Basic settings

For the first installation of Retain server you will only need to adjust the [Global] settings in *SvrCnfg.ini*. The following example shows an Oracle database setting:

[Global]

DBDriver=DOA
DBName=Retain.World
DefaultUser=Retain
DefaultPassword=Retain

DBDriver
This will be the driver used for your database system. The Microsoft SQL Server driver is ADO_SQL and the Oracle driver is DOA.

DBName

This will be one of the following:

- If you are using Oracle, this can be the name set up in the TNSNAMES.ORA file, e.g. Retain.World.
- If you are using SQL Server, this can be the name of the server machine. It can be the string produced by server configuration tools which eliminate the need to specify the user and database (you can then comment out the *DefaultUser* and *DefaultPassword* settings). Otherwise, the *DefaultUser* and *DefaultPassword* are used.

DefaultUser
The user name assigned to database, e.g. Retain. If you are using SQL Server and ADOConnectionString.exe/ServerCnfg.exe does not include the connection information, then this user must have the Retain database set up as its default database.

DefaultPassword
The password assigned to the database, e.g. Retain.

Note: The *DefaultUser* and *DefaultPassword* entries *must* be commented out if you have used integrated security in setting up your login to the database.

You should now be able to run Retain server and to test the connection to the database.

Further settings

- LogClientConnection=1

This setting records the user connections in the ULG table when set to 1.

- MaxStackTraceLength=0

Represents the stack trace level in the log table: 0 = No stack trace; 10 = 10 Lines; -1 = Unlimited.

- UpdateDiarySum

It is false by default. If false, does not populate the table and instead the user would probably want to run the Update scripts. If true, the DGD_SUM table is populated by the Retain Server whenever a diary changes, and also on start up. In larger deployments with multiple servers, it is recommended that this setting is applied to a server that is used by administrators who could potentially change the diaries.

- UpdateDiaryDetail

It is false by default. If true, populates the DGD table when Retain Server is first started.

- MaxUsers

The maximum number of users allowed on to the database through Retain server at any one time.

- MaxClientSendAccepted=5000000

The limit (in bytes) that the server will accept in any single communication from a client application. The above is the default value.

- ThreadPoolCount

Maximum number of threads that Retain server will use to process concurrent requests. The default is 32 which will almost certainly be more than enough.

- ServerPort

The port number of the database server. The server will only run on the designated port and will not automatically try the next port. It will fail to run if there is a server already running on the port. **Note** this information should be available from your database administrator and should not require alteration after the initial set-up.

- BypassClientCalcPresence=1

By default, Retain performs a check for certain calculated fields before start up (the value is 0). You can bypass this check by setting the value to 1, although it is recommended to leave it unchanged.

- ShowErrorMessages=0

The default vale is 0 and it means that errors will only be written to the log file. If set to '1', they will also appear in a dialog.

- USEPWHTABLE=1

This setting encrypts passwords (which are then stored in the PWH table).

- FFASTRING=1=1

If set to 1=1, this setting grants full functional access to the users (within licencing restrictions), regardless the set up in Security Manager. If set to 1=0, the users will be limited to the settings defined in Security Manager. You can also specify certain IP addresses that will be allowed full functional access. For example: FFASTRING=IPADDRESS='127.0.0.1'.

- AcceptDifferentCP

If set to 1, Retain does not perform a check whether Retain Wallchart has a different codepage to Retain Server. The default value is 1.

[Compression]

Compression allows large amounts of data to be compacted before being sent across a network connection, therefore reducing latency times.

- Threshold=10000

Sets the minimum threshold in bytes above which data packets are compressed. Compression does involve extra server processing so there is a trade off between performance and bandwidth usage

- Level=1

To alter the compression level, change the number to the desired setting (1 being the minimum amount of compression and 9 being the maximum). This setting can vastly affect the speed of Retain and should be left on its default of 1.

[BookingRequest]

- AppendNoteWhenRejecting

If set to 1, allows users to add comments to the existing booking request note when rejecting that booking request.

Additional settings

[DBConnect]

- MaxTries=5

This setting specifies the number of times Retain server will try to connect to the database (for Oracle only). Five is the default value.

- RetryAfter=3000

This setting determines the time delay in minutes between the connections. The default is 3000.

[DATABASE]

- ForceRetrieveAll=1

This setting is for SQL Server database connections only. It reduces the SQL Server lock conflicts.

Note that Retain server can also be run with command line parameters which will override any settings in the *ini* file.

- PORT

Specify the port that Retain server will run on.

- CONFIG
The full path of the configuration file (default is *SvrCnfg.ini).*

- ORACLEHOME
Oracle home directory, only required for multiple Oracle installations.

- OCIDLL
Oracle OCI dll. It defines the interface dll and should not be required in normal circumstances.

[Views]

- ShowAll=0
ShowAll will accept all views as tables. The default value is 0 (i.e. the setting is off). If ShowAll=0 then you need to list all views you want the server to treat as tables. For example, RES=View

[Security]

- AcceptUserLogon=0
Determines whether you can accept a user name different to the network logon or not. The default is 0 (can not accept). You would normally only enable this (by setting to 1) where passwords are implemented.

[Locale]

- SizeToNumCharsDivider=4
Defines how many bytes a character can represent for Retain Server. In this case, it will be four bytes.

Advanced settings

The settings below should not be changed without consulting with your Retain support provider.

Each Retain server reserves IDs for each table in blocks of 500 (by default) and uses them sequentially.You can change this default (to 50 for example) but also override this default for specific tables, e.g. BKG:

[TableReserveBatch]

Default=50
BKG=100

Note that Retain *does not* recommend setting the default to 1.

[ScenarioClrSchMappings]

- Default=DefaultScenario
This setting changes the currently selected colour scheme but only if it corresponds to the name in the mapping (e.g. 'Default'). If another colour scheme is selected, the setting will not be used. On the left hand-side of the equation is the colour scheme used when scenario bookings are hidden and on the right-hand side is the scheme that is used when scenario bookings are visible.

[ORACLE_SESSION]

- NLS_SORT=BINARY_CI
This setting is not enabled by default. If used, allows ‘Alter session’ commands to be sent to Oracle on initialisation.

15 Support Services

Support for Retain is available worldwide. This topic is linked to your support provider's information: Support Service Provider.

retaininternational

USA phone:	1 646 688 4496
UK phone:	0845 458 8660
World phone:	+44 20 7538 4774
USA fax:	1 646 478 9475
World fax:	+44 845 458 8661
General E-mail:	info@retaininternational.com
Support E-mail:	support@retaininternational.com
Postal Address:	Retain International Ltd 33 Beaufort Court Admirals Way London, E14 9XL United Kingdom

Index

- T -

- U -

- W -

- Y -