



The Radiology Information Solution

Resource Groups & Personnel Management Module

For more details please contact:

e: sales@hssnet.com

t: 01623 489825

HSS, 3rd Floor, i2 Mansfield, Hamilton Court
Oakham Business Park, Mansfield, NG18 5FB

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Introduction

Purpose

The Resource module enables departments to define Resource Groups comprising a number of contributing stakeholders. This function is designed to facilitate the management and allocation of work, and streamlining workflow for greater efficiency / collaboration via the CRIS Vetting, Appointments and Reporting Modules.

The Resource Management Module also allows departments to rota staff and equipment and to assign essential resources to exams to facilitate accurate, paperless appointment systems. The Trust can create a resource or resource groups and manage appointments by viewing room diaries in conjunction with staff availability.

A resource could be any type of person from a Sonographer to a Radiologist / Clinician, or even equipment such as mobile imaging.

Audience

This document has been designed to explain the whole module including creating a resource / resource group, managing appointments around resources and everything else. The final section covers configuration of the module aimed at RIS / PACS System Managers.

Resource Module / Resource Groups

VETTING, APPOINTMENTS or RECEPTION mode is typically the most appropriate mode for use with the Resource module, although there is no specific mode associated with this module and users can therefore use their preferred mode where applicable. The Resource module enables Resource Groups to be defined comprising a number of contributing stakeholders to facilitate allocating work, and streamlining workflow for greater efficiency / collaboration via the CRIS Vetting, Appointments and Reporting Modules.

GLOSSARY OF TERMS

RESOURCE GROUPS – Resource Groups are groups of available stakeholders (i.e. Neuro, MSK, Vascular, Pediatric clinicians who can vet, perform or report certain procedures). Resources can belong to multiple groups at any time. When applying Resource Groups, you can manually allocate the 'Group' via the individual event or from a worklist. You can also allocate a Group to batches of events / requests via Worklists or configure CRIS to automatically assign groups to examinations.

RESOURCES – Represent clinicians or any other kind of stakeholder who will be part of a Resource Group / Pool for Vetting, Scheduling or Reporting purposes ((i.e. Radiologists, Superintendent Radiographers, Sonographers etc. or even equipment such as mobile imaging). A resource may belong to several groups and can be allocated individually or automatically by CRIS according to availability.

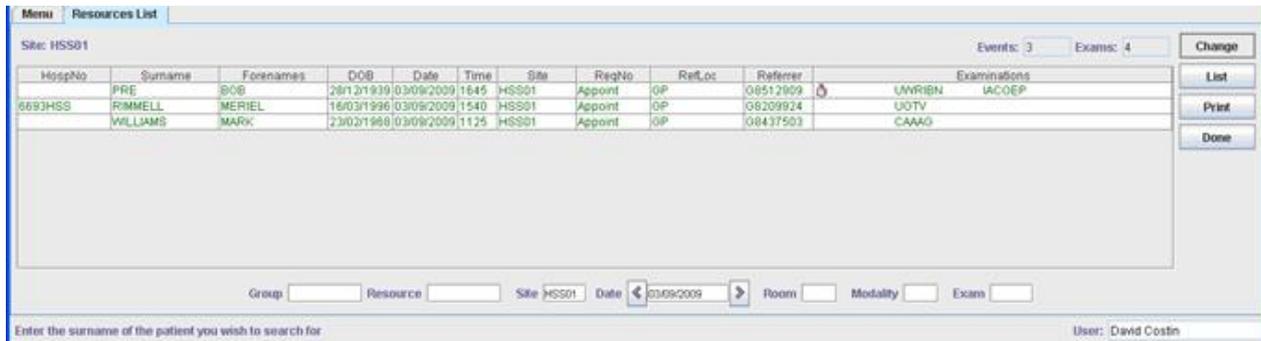
RESOURCE AVAILABILITY – This function is used to define if a resource is available on a given date. It is possible to pre-configure all required types of availability (i.e. Performing Examinations, Reporting, Study Leave, and Annual Leave etc.) including specifying the availability of each type (i.e. present / not present) which can also be overridden where permitted.

RESOURCE DEFAULTS – This feature is designed to enable the resource management module to be pre-configured to specify what resources are required via the Exams Per Hospital Table (i.e. If a CT Angiogram is going to be performed then stakeholders from a specific resource group will need to be available).

REASONS – These are used to describe a resource or resource group's availability based on pre-defined category types (i.e. Performing Examinations, Reporting, Study Leave, and Annual Leave etc.)

RESOURCE LIST (CLINIC VIEW)

This list functions in a very similar fashion to the [Appointments List], the main difference is that the [Resource List] is designed to show resources (i.e. Radiologists) their forthcoming appointment schedules. This provides Clinic list functionality using the filters at the bottom of the screen to view individual resources, or resource groups to see which patients they have coming for scans.



Filter	Description
Group	Allows users to filter the list based on a specific resource group
Resource	Allows users to filter the list for an individual resource
Site	Allows users to filter the list for a specific site
Date	Allows users to specify a date as applicable
Room	Allows users to filter the list based on room
Modality	Allows list to be filtered for a specific modality
Exam	Allows user to filter the list for a specific examination

Upon using any filter, or combination of filters it will be necessary to click the [List] function button to display the data as requested.

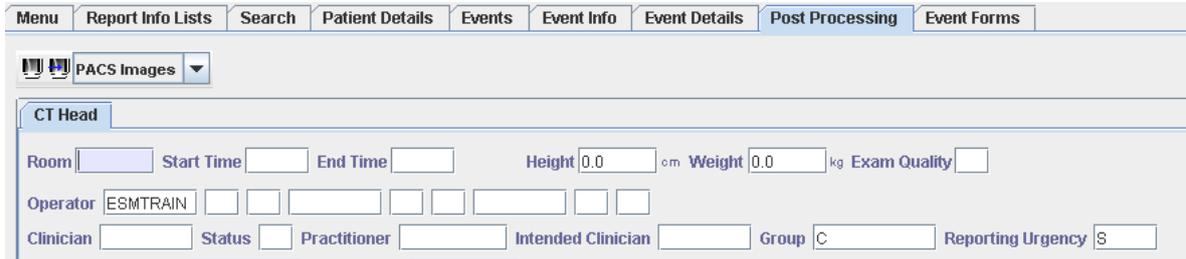
ASSIGNING RESOURCE TO EVENTS

Resources can be allocated to an event at any stage during a patient journey through the system. The Event Details and Post Processing screens both have a 'Group' field to enable users to manually allocated the event (i.e. All Examinations) to a Vetting, Scheduling or Reporting Group. It is also possible to assign Groups to batches of events via worklists using the right-click menu options.

- Event Details Screen

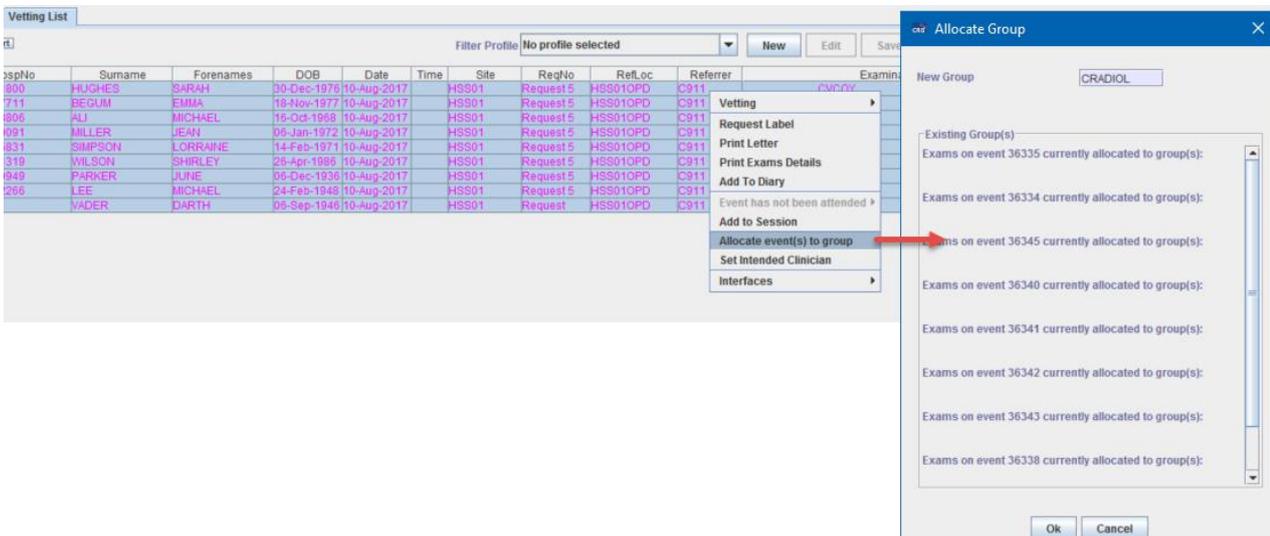


- Post Processing Screen



The screenshot shows the 'Post Processing' tab in the software. It includes a 'PACS Images' dropdown menu, a 'CT Head' section, and various input fields for 'Room', 'Start Time', 'End Time', 'Height', 'Weight', 'Exam Quality', 'Operator', 'Clinician', 'Status', 'Practitioner', 'Intended Clinician', 'Group', and 'Reporting Urgency'.

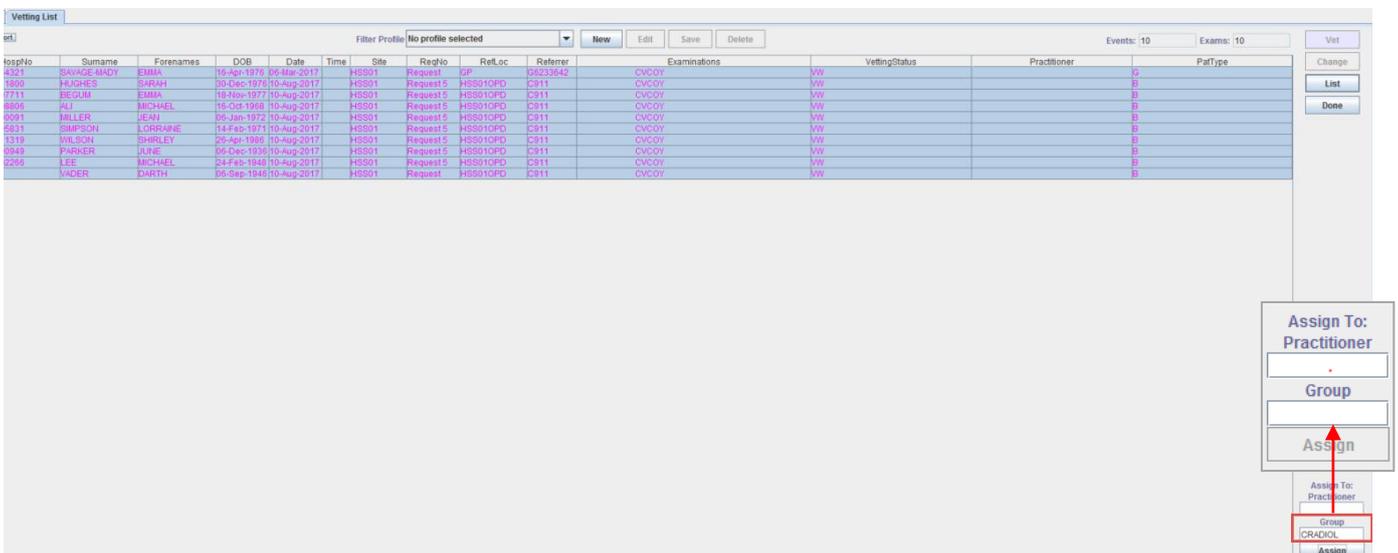
- Event lists (via right-click, multiple events can be selected)



The screenshot displays a 'Vetting List' table with columns for 'aspNo', 'Surname', 'Forenames', 'DOB', 'Date', 'Time', 'Site', 'ReqNo', 'RefLoc', 'Referrer', and 'Exam'. A right-click context menu is open over the table, with 'Allocate event(s) to group' highlighted. An 'Allocate Group' dialog box is also open, showing a list of existing groups and their associated exams. A red arrow points from the 'Allocate event(s) to group' menu item to the dialog box.

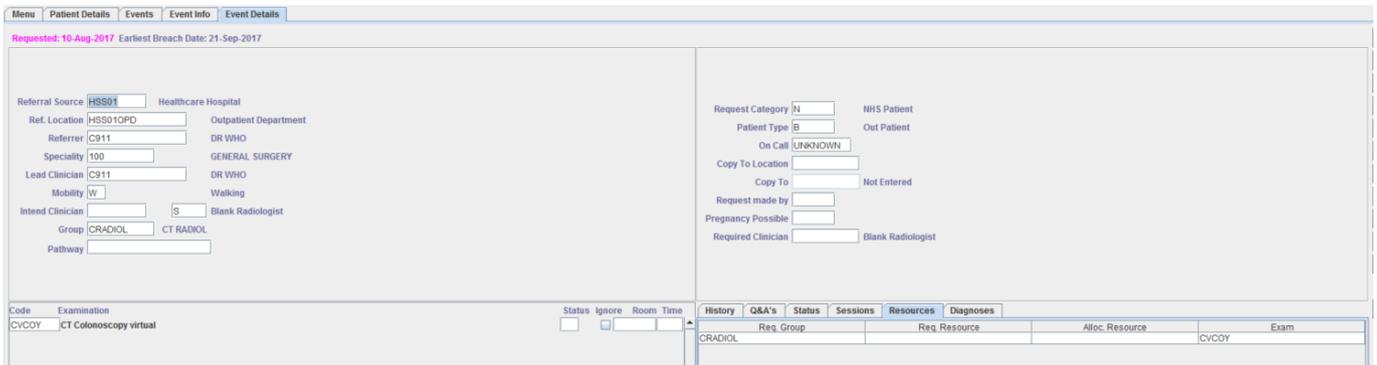
Please note: Use of the event level Group allocation will overwrite any individual Exam level resource allocations. Additionally, all of the above functions are only available when the **XR Setting – GENERAL.SingleResourceGroupPerEvent** is set to Yes via TABLES > SYSTEM TABLES > XR Settings.

- [Vetting List] via the **Assign to 'Group'** field which can be used via single or multi-event selections.



The screenshot shows the 'Vetting List' table with columns for 'aspNo', 'Surname', 'Forenames', 'DOB', 'Date', 'Time', 'Site', 'ReqNo', 'RefLoc', 'Referrer', 'Examinations', 'VettingStatus', 'Practitioner', and 'PatType'. A dialog box titled 'Assign To: Practitioner' is open, showing a 'Group' field with 'CRADIOL' selected and an 'Assign' button.

Once an event is allocated to a Group it is also displayed on the 'Resources' tab via the Event Details.



It is also displayed via the hover help on the examination via the patient 'Events' list or any [Worklist].



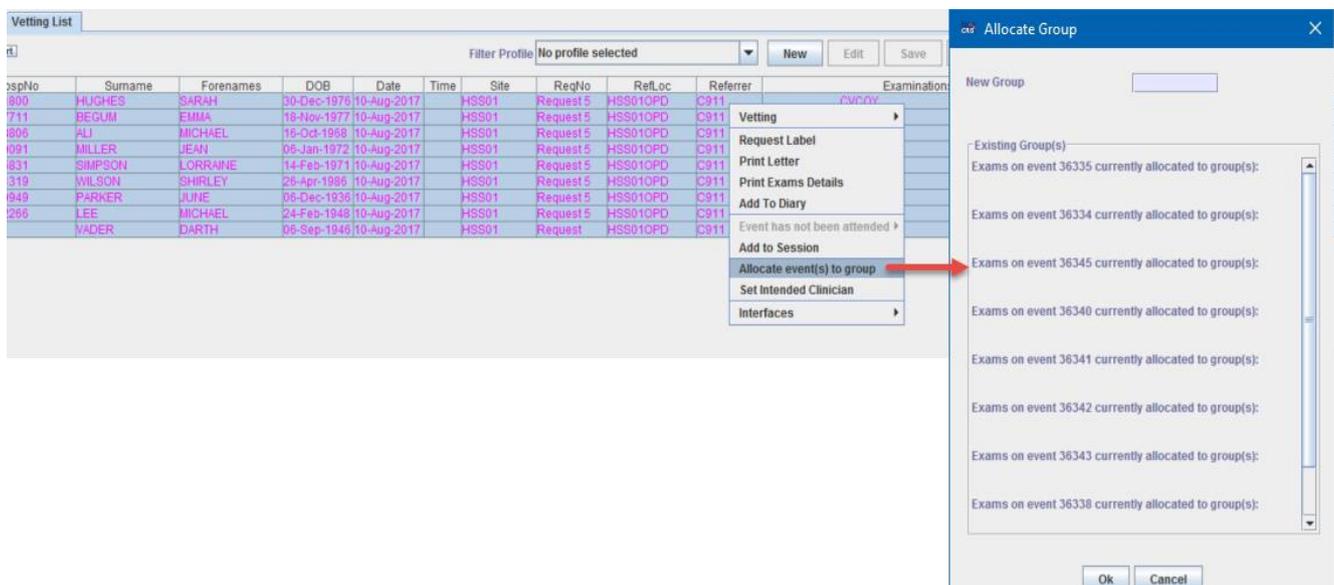
ospNo	Surname	Forenames	DOB	Date	Time	Site	ReqNo	RefLoc	Referrer	Examinations
2780	EASTWOOD	CLINT	04-May-1950	12-Jul-2016		HSS01	Request	HSS01OPD	C911	CSKUH
	WOOD	SAM	02-Jun-1989	01-Dec-2016		HSS01	Request	HSS01OPD	C999	CABDOC
	SALLY	TWOTEAS	Unknown	14-Dec-2016		HSS01	Request 5	HSS01OPD	C936	CNE CT Head
	LEAH	PRINCESS	15-Mar-1996	07-Dec-2016		HSS01	Request 5	HSS01OPD	C911	CABI PACS Accession No:HSS0100035421
	PIG	GEORGE	04-Oct-1971	12-Oct-2016		HSS01	Request 5	HSS01OPD	C911	MLSI Group: CRADIOL

AMENDING RESOURCE DETAILS

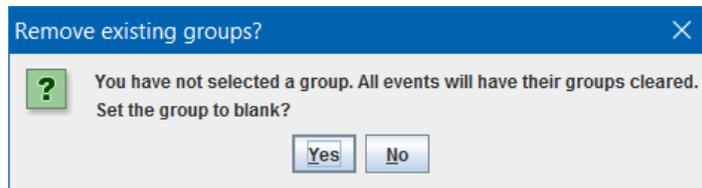
It is also possible to **AMEND RESOURCE DETAILS** at any time as follows:

SINGLE EVENT DETAILS can be modified by loading the event, and changing or removing the details in 'Group' field. This will overwrite the Group for all examinations on the event when you save the changes to the event.

MULTIPLE EVENTS can be modified by multi-selecting all required events using [Ctrl + Click] or [Shift + Click] and using the right-click menu to re-assign to an alternative group. Alternatively using this method, you can also remove the group by leaving the field 'Blank' and clicking [OK].

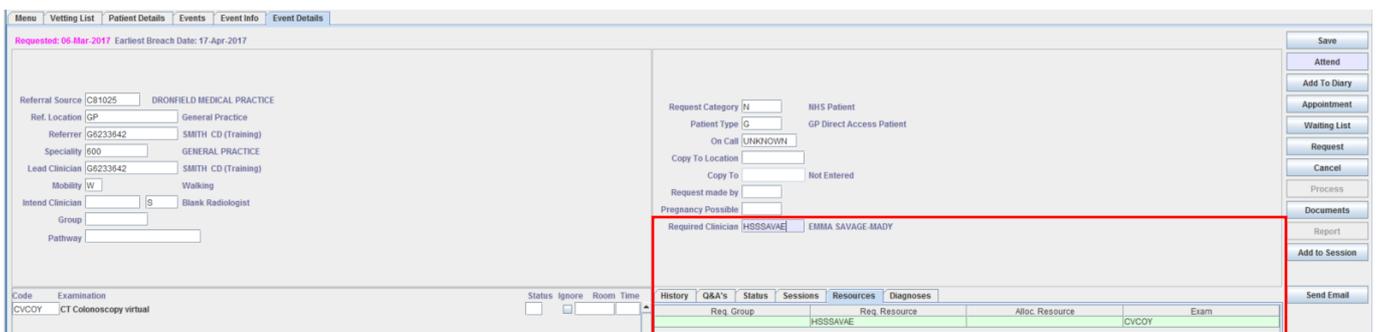


A warning message will appear to confirm that you intend to remove the group and upon clicking [Yes] the group will be cleared from all relevant events.



ASSIGNING SPECIFIC / NAMED RESOURCES FOR SCHEDULING PURPOSES

It is also possible to assign a specific (i.e. named) resource for **Appointment Scheduling** purposes via the use of the **'Required Clinician'** field located above the Resources tab on the Event Details screen. If a clinician is entered via this field the associated resource will automatically be inserted for the event, although it will still be possible to assign additionally resources as necessary.



Please note: This function is not for use in conjunction with the Vetting Module as **'Practitioner'** should be used in this context, or Reporting which is undertaken via the **Intended Clinician** field. This Group function should however replace the use of fake / pseudo practitioners or Intended Clinicians which may have been in use prior to Group functionality.

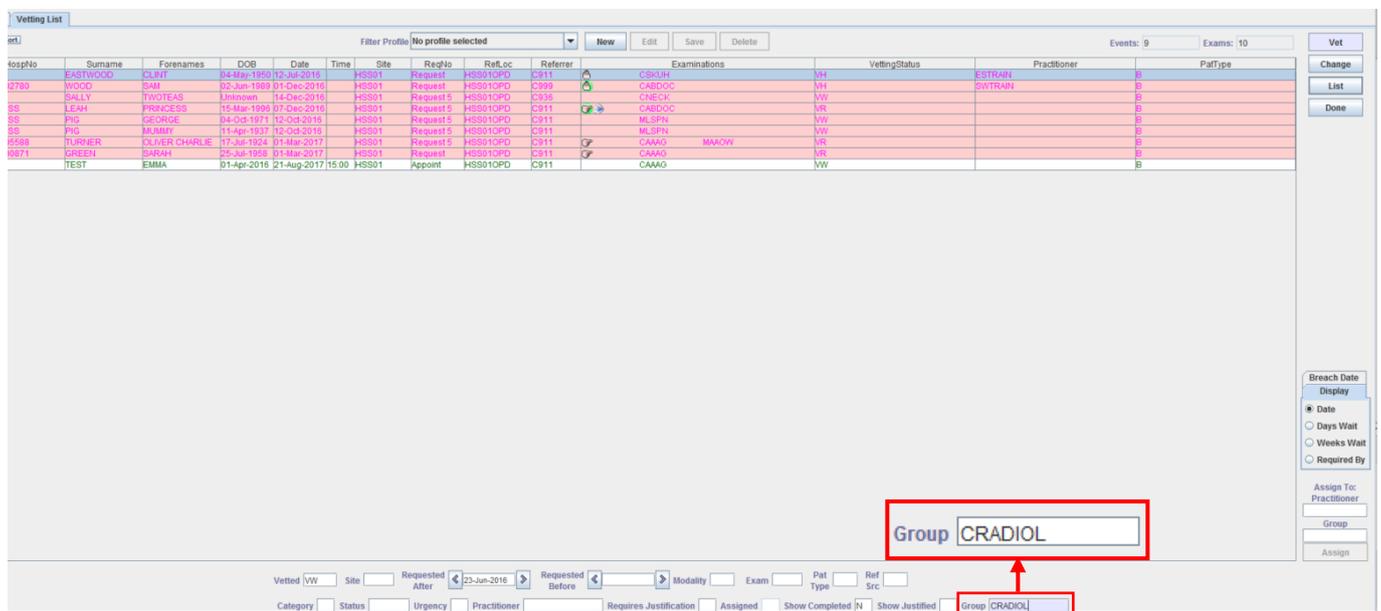
Additionally - you must ensure that the Resource has a reciprocal 'Clinician' code entered via the Resources set-up table.

Viewing & Using Resource Groups

Once an event / request has been assigned to a Resource Group it can be accessed via the [Vetting Module], [Appointments Diary] and [Report Info List]. In this way, the resource group remains valid from the point of request through to reporting streamlining the process and thereby reducing the need for dual entry of *Practitioner* for *Vetting* and *Intended Clinician* for *Reporting*. The group can also be entered or changed at any point throughout the patient journey as applicable.

Vetting Module View

Vetting Group Worklists can be accessed via the new 'Group' field at the bottom of the [Vetting List]. This will display any events / exams assigned to the selected group for the filter range specified. Additional filtering can also be applied whilst using the group function (i.e. Patient Type, Modality).



Id	Surname	Forenames	DOB	Date	Time	Site	RegNo	RefLoc	Referrer	Examinations	VettingStatus	Practitioner	PatType
0280	WOOD	SM	02-Jun-1989	01-Dec-2016		HSS01	Request	HSS01OPD	C999	CABDOC	MR	SWTRAH	B
05	BALY	THOMAS	Unknown	14-Dec-2016		HSS01	Request	HSS01OPD	C336	CHECK	MR		B
05	LEAH	FRANCES	15-Mar-1996	07-Dec-2016		HSS01	Request	HSS01OPD	C811	CABDOC	MR		B
05	PIG	GEORGE	04-Oct-1971	12-Oct-2016		HSS01	Request	HSS01OPD	C811	MLSPN	MR		B
05	PIG	MAMMY	11-Apr-1997	12-Oct-2016		HSS01	Request	HSS01OPD	C811	MLSPN	MR		B
0588	TURNER	SILVER CHARLE	15-Jun-1934	11-Mar-2017		HSS01	Request	HSS01OPD	C911	CAAG	MR	MAACW	B
0571	GREEN	SARAH	25-Jun-1958	01-Mar-2017		HSS01	Request	HSS01OPD	C811	CAAG	MR		B
	TEST	EMMA	01-Apr-2016	21-Aug-2017	15:00	HSS01	Appoint	HSS01OPD	C911	CAAG	MR		B

Group:

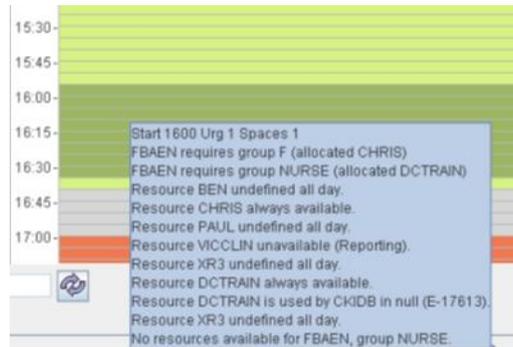
Appointment Scheduling via the Diary

The appointments module also enables scheduling based on room and resource availability. Once an event has been allocated a required 'Resource Group' or 'Resource' - the diary will be shaded to highlight whether or not resources are available on a given date and time. If no stakeholders are available via the required resource group it will not be possible to book appointments, without adding availability for a resource ignoring the requirement.

IDENTIFYING AVAILABLE & UNAVAILABLE RESOURCES

If a RESOURCE IS AVAILABLE the slots will be shaded in the usual light green colour to indicate that both the rooms slot and resource can be booked. Alternatively, if a RESOURCE IS NOT AVAILABLE the slot will be shaded in a darker green to indicate the resource(s) required are not available.

DIARY VIEW



Hovering over a slot will display details of all applicable resources which are comprised of 3 main categories:

- AVAILABLE** For booking at the required time
- UNDEFINED** The Resource is subject to the on-line personnel system via CRIS, but no rota / work pattern has been defined for via the Personnel / Resource Module (i.e. Unknown availability)
- UNAVAILABLE** The resource is scheduled a category that does not include performing exams at the time selected (i.e. Reporting, Teaching etc.)
- ALWAYS AVAILABLE** The resource has been defined as 'always available' indicating they are not covered by the on-line personnel system via CRIS. When an off-line rota is in place this is usually indicated via the diary comments.

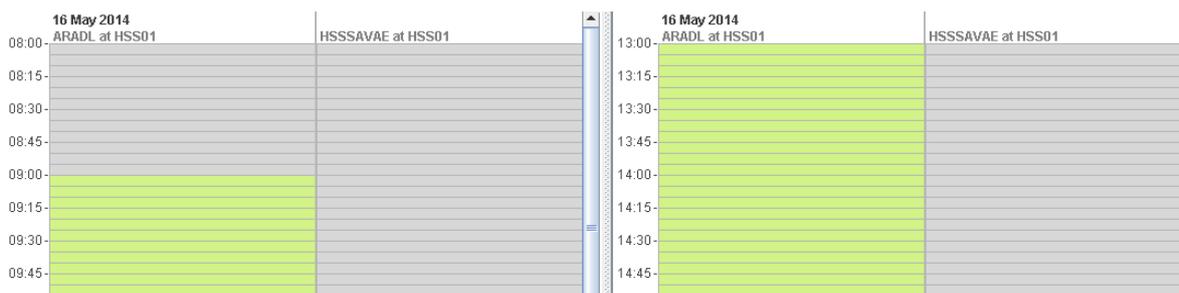
RESOURCE DIARY VIEW

The diary also incorporates the facility to view availability for a resource or group of resources which is broken down into individual resources for the selected exam on a specific date, or for the week ahead.

You can choose to display the 'Resources' Single day view or Week ahead viewer.

Resources within a group can be viewed by selecting the appropriate option via the **Group** filter.

SINGLE DAY VIEW

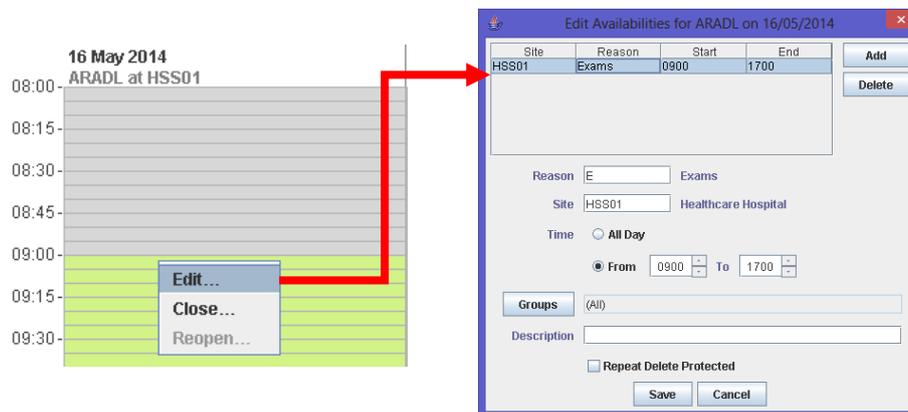


WEEK AHEAD VIEW



EDITING RESOURCE AVAILABILITY

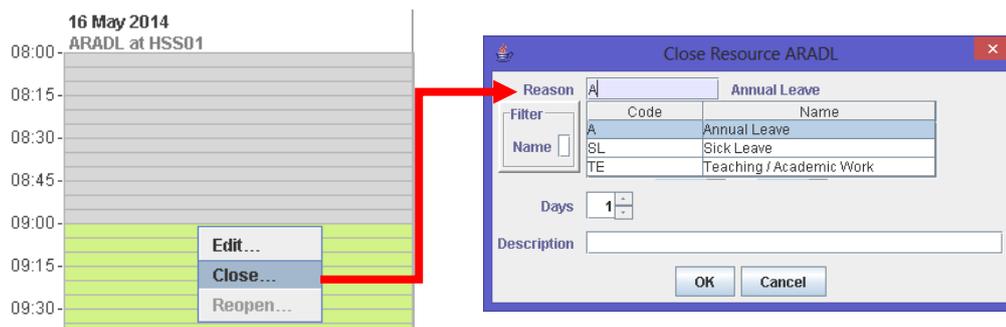
It is also possible to **EDIT**, **CLOSE** and **REOPEN** resource commitments via the Single day view by right clicking any slot, and selecting from the resulting menu.



The screenshot shows a single-day view for 16 May 2014 with a context menu open over a resource commitment. A red arrow points from the 'Edit...' option to the 'Edit Availabilities for ARADL on 16/05/2014' dialog box. The dialog box contains the following fields:

Site	Reason	Start	End	Add
HSS01	Exams	0900	1700	

Additional fields include: Reason (E), Site (HSS01), Time (All Day), From (0900), To (1700), Groups ((All)), Description, and Repeat Delete Protected (checkbox).



The screenshot shows a single-day view for 16 May 2014 with a context menu open over a resource commitment. A red arrow points from the 'Close...' option to the 'Close Resource ARADL' dialog box. The dialog box contains the following fields:

Reason: Annual Leave

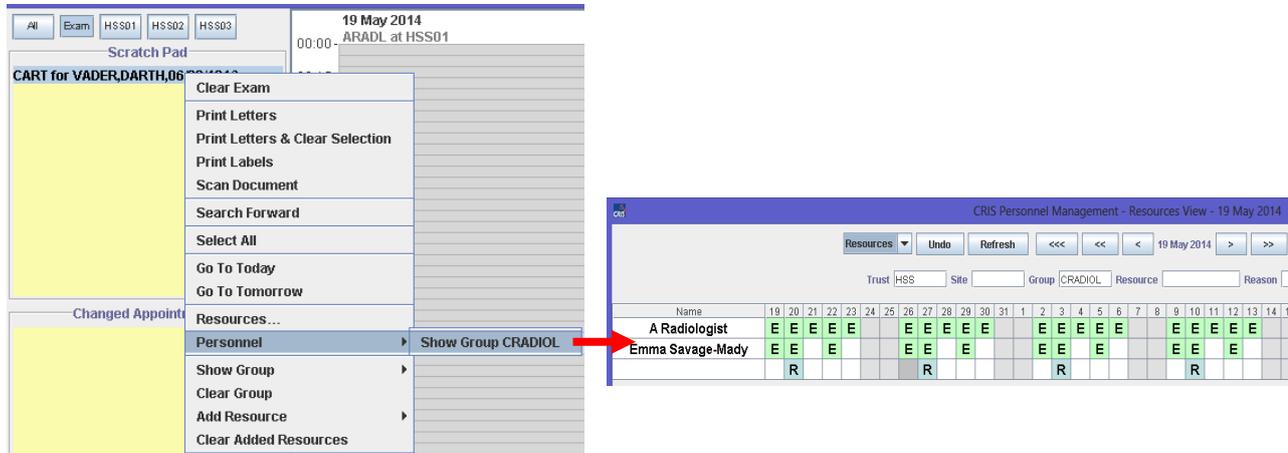
Filter	Code	Name
A		Annual Leave
SL		Sick Leave
TE		Teaching / Academic Work

Additional fields include: Days (1), Description, and OK/Cancel buttons.

Alternatively, you can choose to display general resource availability by right clicking via the diary 'Scratch Pad' and selecting from the resulting menu. These options are especially useful if you wish to view resource availability as a group in general rather than in conjunction with booking an appointment.

PERSONNEL VIEW

This option launches the Personnel Management view to display the specific detail of the Rota for a date range.

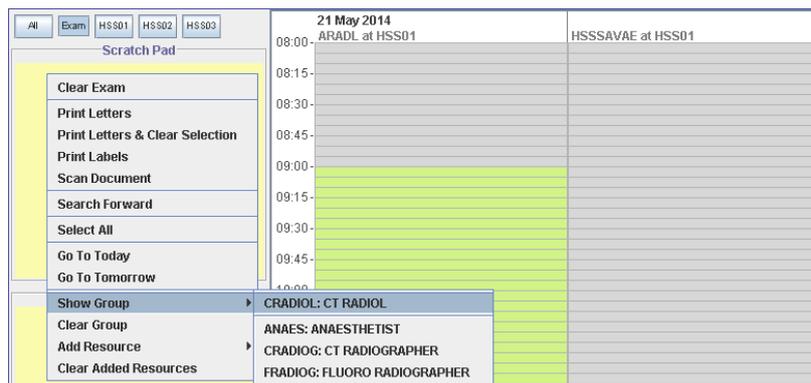


The screenshot shows the 'Personnel' menu option selected in the context menu. The main window displays the 'CRIS Personnel Management - Resources View - 19 May 2014' with a grid of resources and their availability for the month of May 2014. The grid shows 'A Radiologist' and 'Emma Savage-Mady' with 'E' (Available) and 'R' (Unavailable) markers.

Name	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A Radiologist	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Emma Savage-Mady	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E

SHOW GROUP

Use this function to display a group of resources (i.e. CT Radiologists), or repeat to display multiple groups (i.e. CT Radiogs and CT Radiol)



The screenshot shows the 'Show Group' menu option selected, displaying a list of resource groups. The main window shows a grid for '21 May 2014' with a highlighted area for 'HSSSAVAE at HSS01'.

Group
CRADIOL: CT RADIOL
ANAES: ANAESTHETIST
CRADIOG: CT RADIOGRAPHER
FRADIOG: FLUORO RADIOGRAPHER

Once completed this option should be used in conjunction with **Clear Group** to restore the default view.

ADD RESOURCE

Use this function to select and display an individual resource, or repeat to display multiple resources. Once completed this option should be used in conjunction with **Clear Added Resources** to restore the default view.

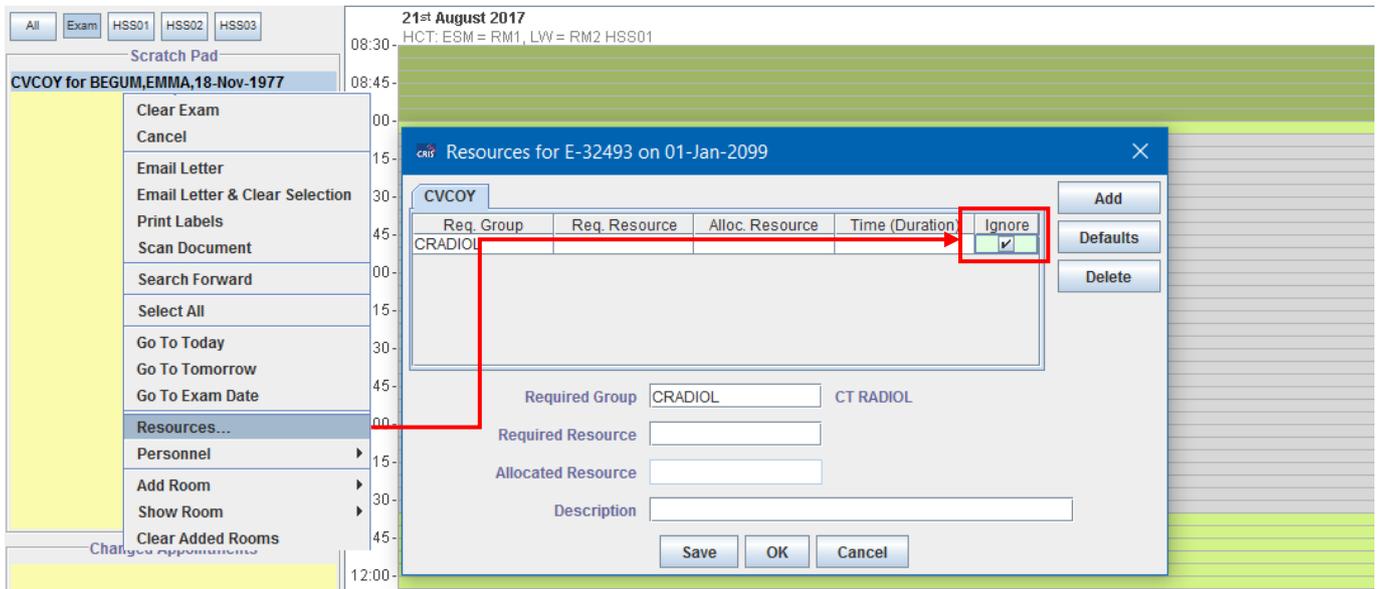


The screenshot shows the 'Add Resource' menu option selected, displaying a list of individual resources. The main window shows a grid for '28 May 2014' with a highlighted area for 'ARADL at HSS01'.

Resource
(No resources used)
A Radiologist
Healthcare Hospital Radiographer
Stuart Forrest
Emma Savage-Mady

IGNORING A RESOURCE

If the room and resource are not available on a given date and time and it is not possible to book a required appointment slot. This can be overridden by right clicking



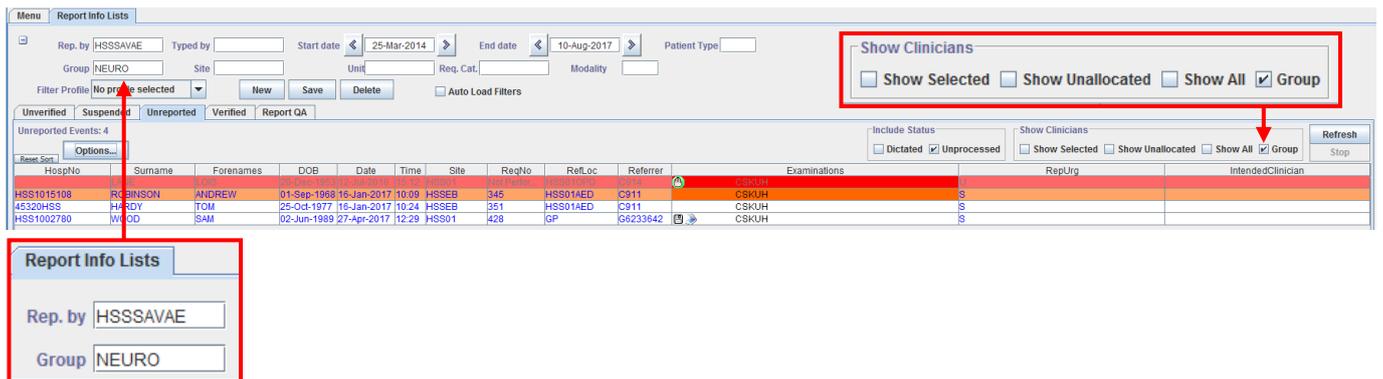
The screenshot shows a resource management dialog box for a specific exam. The dialog has a table with the following data:

Req. Group	Req. Resource	Alloc. Resource	Time (Duration)	Ignore
CRADIOL				<input checked="" type="checkbox"/>

Below the table, there are fields for 'Required Group' (CRADIOL), 'Required Resource', 'Allocated Resource', and 'Description'. The 'Ignore' checkbox is highlighted with a red box, and a red arrow points from the 'Resources...' menu item in the left sidebar to the dialog box.

Report Info List View

Reporting Group Worklists can be accessed via the new 'Group' fields and filter option via the [Report Info List]. This will display any events / exams assigned to the selected group for the filter range specified. Additional filtering can also be applied whilst using the group function (i.e. Patient Type, Modality).



The screenshot shows the 'Report Info Lists' interface. The search form has the following values:

- Rep. by: HSSSAVAE
- Group: NEURO
- Start date: 25-Mar-2014
- End date: 10-Aug-2017
- Patient Type: (empty)

The 'Show Clinicians' section has the following options:

- Show Selected:
- Show Unallocated:
- Show All:
- Group:

The 'Report Info Lists' section has the following fields:

- Rep. by: HSSSAVAE
- Group: NEURO

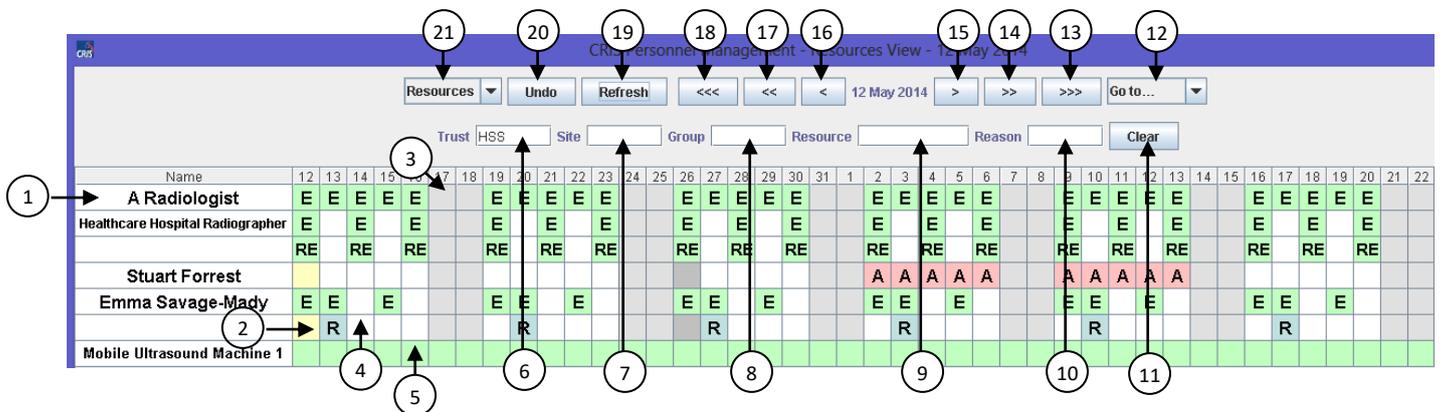
Please note: The group list will only display Groups for which the logged in user is defined as a stakeholder via the Resources table.

Personnel Management / Staff Rota's

Before you can begin making appointments based on resource availability it will be necessary to create an appropriate rota for all relevant resources. Managing personnel is primarily undertaken from the CRIS Personnel Management - Resource View screen which is accessed via the 'Show Personnel' icon  at the top of the main CRIS screen. This screen will display any person who has been setup on the system as a 'Resource' and is designed to enable you to define a rota for each relevant resource for any given date range as required.

THE PERSONNEL MANAGEMENT – RESOURCE VIEW EXPLAINED

Begin by completing the Trust and or Site filter and click [Refresh] to display all available resources.



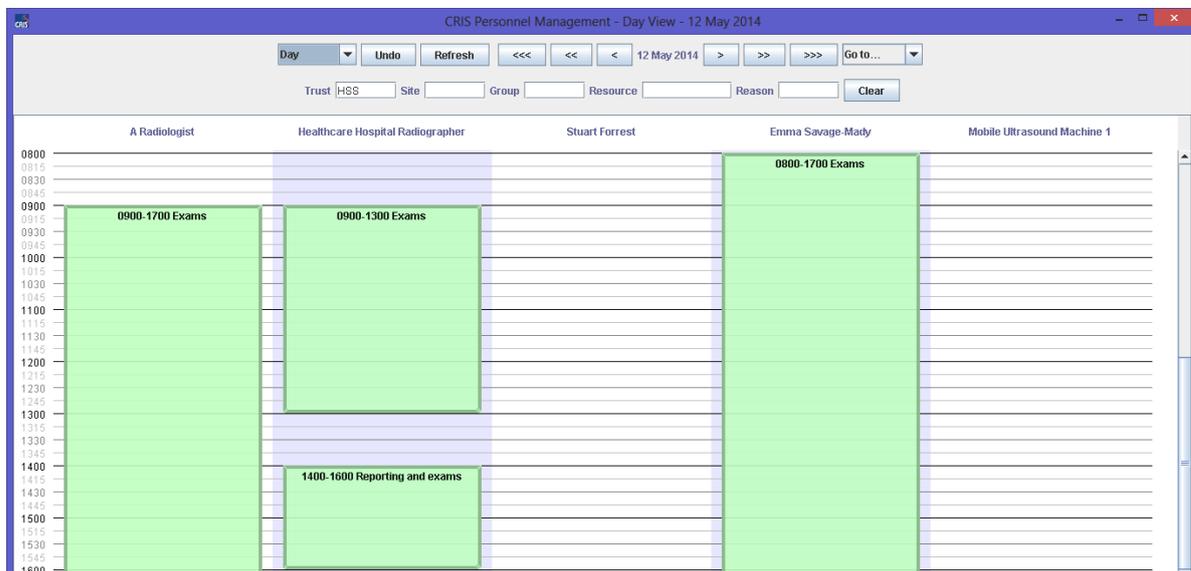
No.	Description / Purpose
1	Name of individual resource
2	Yellow box identifies the current day
3	Dark grey boxes indicates a weekend
4	White boxes indicates no schedule for the resource (i.e. UNDEFINED)
5	Green boxes indicate that a resource has been marked as available all day <i>Please note:</i> This should only be used for equipment not staff as it indicates 24/7 availability.
6	Complete the Trust filter, or press [F4] to choose from a list of options and click [Refresh] to display the schedule for all resources in the Trust
7	Complete the Site filter, or press [F4] to choose from a list of options and click [Refresh] to display the schedule for the current site
8	Use this filter to display a Resource Group (i.e. CT Radiographers, Fluoro Radiographers etc.) by entering the relevant code or pressing [F4] to choose from a list of options
9	Use this filter to display the schedule for an Individual Resource (i.e. CT Radiographers, Fluoro Radiographers etc.) by entering the relevant code or pressing [F4] to choose from a list of options
10	Use this filter to display the resource schedule based on Resource Reason (i.e. Annual Leave, Reporting, Available for Examinations etc.) by entering the relevant code or pressing [F4] to choose from a list of options
11	This function will clear the screen completely as an alternative to removing filters individually
12	Use the 'Go to...' feature to navigate to Today, This Week, This Month, Next Month or the 01/01/1990 Template
13	Moves schedule forward to next month

14	Moves schedule forward to next week
15	Moves schedule forward to next day
16	Moves schedule back to previous day
17	Moves schedule back to previous week
18	Moves schedule back to previous month
19	Use this function button to Refresh the screen after entering or removing any filter criteria's
20	Use this function button to undo the most recent change made

The Personnel Management 'View Selection' filter allows you to display schedules according to one of the following options:

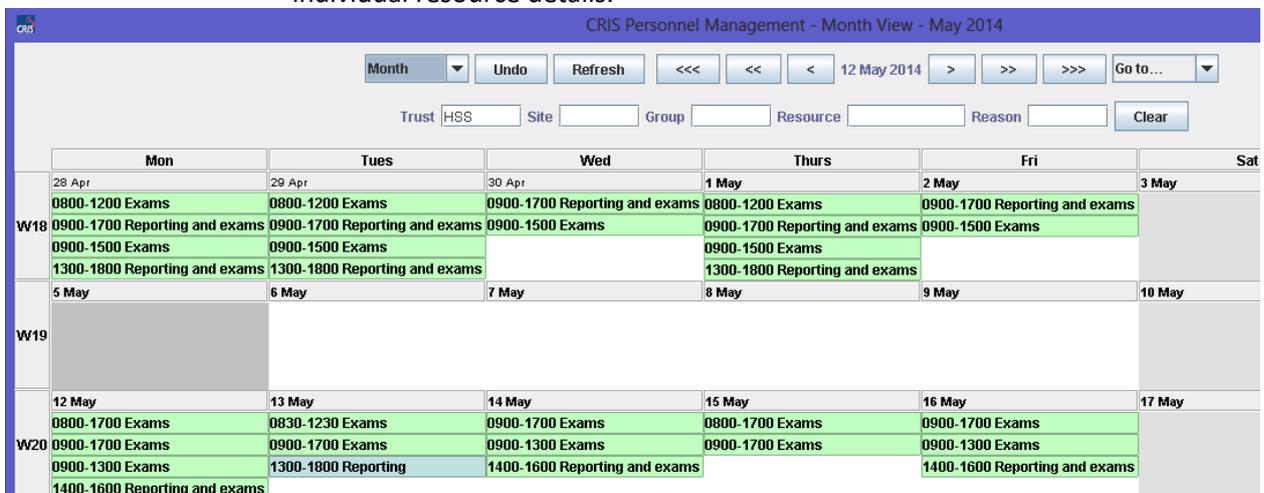
RESOURCES Displays an overview of all individual resources (As per above diagram)

DAY Displays all individual resource for a selected date



21

MONTH Displays a comprehensive overview of all resource schedules for the entire month, although it will be necessary to use hover help to display individual resource details.



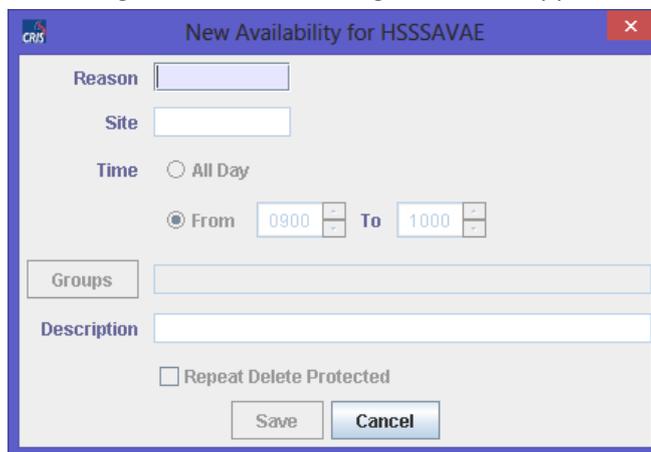
ADDITIONAL FUNCTIONALITY:

When using the **DAY VIEW** – it is possible to extend or reduce commitments by dragging them bigger or smaller, negating the need to manually edit the entry.

When using the **MONTH VIEW** – it is possible to drag and drop commitments to an alternative slot, or to click and drag a commitment to an alternative slot which will copy it to the destination.

DEFINING RESOURCE AVAILABILITY (I.E. ROTA / DAY TO DAY COMMITMENTS)

To define resource availability right click on a given date via the row for the relevant resource / individual and date and choose [New] from the resulting menu - the following screen will appear.

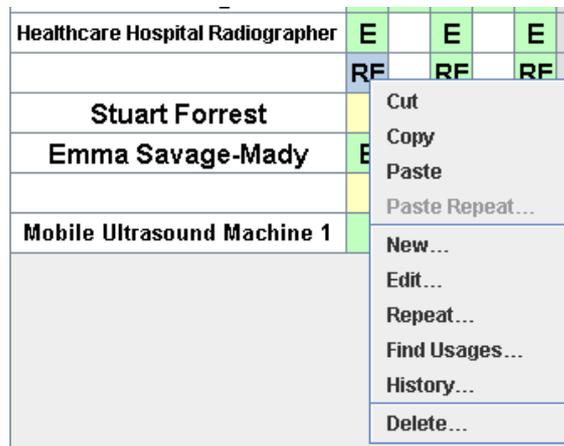


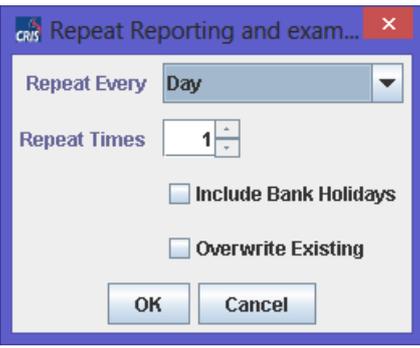
Option	Description
Reason	Enter an availability code for the individual resource, or press [F4] to choose from a list of available options <i>Please note:</i> Each reason type can be configured at set-up to determine if a resource is available (present) in general as well as for scheduling / performing exams.
Site	Enter the hospital relevant to the resource. If the resource works at multiple hospitals, this should be left blank
Time	Select either 'All Day' (i.e. For the duration of the diary via appointments) or enter the time From and To the resource is available or unavailable.
Group	Clicking the [Groups] function button will allow you to specify which groups the resource is available for on a given date. This is based on a list of relevant groups they are already assigned to via the Resource configuration table. Alternatively, ignoring this function will make the resource available to 'All' assigned groups.
Description	This can be used for further information, any special notes etc.
Repeat delete protected	Allows users to protect a schedule entry, such as annual leave in the event that someone ticks overwrite when copying forward in future.

Click [Save] once the above details have been entered.

EDITING, COPYING OR REPEATING RESOURCE AVAILABILITY

Having created a commitment for a least one resource it is possible to amend, copy or repeat the same event for a period of time. To do this right-click the relevant commitment and select the appropriate options as follows:



<p>Cut</p>	<p>When used in conjunction with 'paste', it is possible to cut and paste a commitment to an alternative date or resource</p> <p><u>Please note:</u> It is also possible to highlight multiple commitments for one or more resources, over one or more dates using Shift or Ctrl + Click to multi select before cutting.</p>
<p>Copy</p>	<p>Copy can be used in conjunction with 'paste' for a one-off date, or in conjunction with 'paste repeat' to repeat the copied event over a specified period of time.</p> <p><u>Please note:</u> It is also possible to highlight multiple commitments for one or more resources, over one or more dates using Shift or Ctrl + Click to multi select before copying.</p>
<p>Paste</p>	<p>Use to Paste one or more commitments to a one-off destination date</p>
<p>Paste Repeat</p>	<p>Used in conjunction with 'copy' to repeat the copied event over a specified period of time (i.e. Repeat every Day, Weekday, Week, Two Weeks, Three Weeks, Month, Two Months and Year).</p> <div data-bbox="678 1388 1098 1736" data-label="Image">  </div> <p>You should select a 'Repeat Every' option, and specify the number of 'Repeat Times' – i.e. 1 day, 1 week, 2 months etc. and choose whether or not to include bank holidays or not. Overwrite existing will replace any existing commitments (i.e. delete the original) which is useful when editing / amending an existing schedule but should be used with care and only after assessing existing commitments prior to proceeding.</p> <p><u>Please note:</u> If a commitment has been marked as 'Repeat delete protected' when it was entered or protected via the set-up tables (i.e. Annual Leave) it will not be changed even when using Overwrite existing and will need to be amended manually.</p>

New	Use to create a new resource availability / commitment (as per above instructions)
Edit	Use this function edit an existing resource availability / commitment
Repeat	<p>This function can be used to repeat single or multiple resource commitments, for one or more dates. To do this select either the individual resource commitment, or multiple resource commitments for one or more dates using Shift or Ctrl + Click and choose 'Repeat' from the right-click menu.</p>  <p>In the same way, as 'Paste Repeat' you should select a 'Repeat Every' option, and specify the number of 'Repeat Times' – i.e. 1 day, 1 week, 2 months etc. and choose whether to include bank holidays or not. Overwrite existing will replace any existing commitments (i.e. delete the original) which is useful when editing / amending an existing schedule but should be used with care and only after assessing existing commitments prior to proceeding.</p> <p><u>Please note:</u> If a commitment has been marked as 'Repeat delete protected' when it was entered or protected via the set-up tables (i.e. Annual Leave) it will not be changed even when using Overwrite existing and will need to be amended manually.</p>
Find Usages	This function allows you to select an availability / commitment and establish if the resource is assigned to any existing events / examinations for a given date. This is particularly useful in assessing changes to schedules and requests for annual leave
History	This function provides an audit trail of the creation and amendments to any existing availability / commitments. The top panel shows: I (for insertion of a new item) or U (for an update), the date and time of the update and the login ID of the user (not the user ID). The bottom panel shows the same information as is displayed via hover help.
Delete	Use this option to remove existing availabilities / commitments one by one or in a block using Shift or Ctrl + Click before selecting 'Delete' from the right-click menu. A warning message to confirm deletion will appear prior to deletion.

USING PERSONNEL MANAGEMENT TEMPLATES

It is possible to set-up a Personnel Management template for one, some or all resources for any availability / commitments which occur on a regular basis. In this way having created a standard template by choosing '**GO TO...**' > **TEMPLATE** for an appropriate Trust or Site you can then multi select a range of days, or week for one of more resources using Shift or Ctrl + Click and copy and paste or paste repeat the template to any dates in the future.

Please note: The Personnel Management Template intentionally defaults to 01/01/1990, but once you have copied the selected range you can navigate to any future date and paste or paste repeat as necessary.

Resource Management System Access

In order to make use of the Resource Management Module it will first be necessary to configure the relevant system management tables, and to continue to maintain some of these tables on an ongoing basis as additional resources become available or unavailable accordingly.

RESOURCE MANAGEMENT - SYSTEM > LICENCES

Following receipt of your purchase order, a Resource Management License will be created by HSS to activate the Resource Management Module. This Resource Management License is saved in the License table, do NOT delete this from the License table as the Resource Management Module will be deactivated.

XR SETTINGS

The following XR setting are designed for use with the Resource Management Module. These settings can be applied at XRTR (Trust), XRS (Site) or XRT (Terminal) Level as applicable via **TABLES > SYSTEM TABLES > XR SETTINGS**.

Setting	Description	
EVENTLIST.Resources	Available column codes for Resources List	
GENERAL.ResourceManagementModuleAvailable	Is the resource management module available?	Yes
GENERAL.SingleResourceGroupPerEvent	Only allow a single resource group to be set per event	Yes
RESOURCING.EndTime	End time in Personnel Day View and Diary Resource Day View (hhmm)	2100
RESOURCING.ResourceOnAttend	Resource events on attendance	Y
RESOURCING.SlotLength	Slot length in Diary Resource Day View (minutes)	5
RESOURCING.StartTime	Start time in Personnel Day View and Diary Resource Day View (hhmm)	0800

Setting	Purpose
Eventlist.Resources	Press [F4] to define the default columns which should appear via the [Resource List].
General.ResourceManagementModuleAvailable	Select Yes to enable the Module.
General.SingleResourceGroupPerEvent	Select Yes to enable Group allocation via Event Details, Post Processing and right-click menu options via [Worklists].
Resourcing.EndTime	Allows a default time range to be set within the Diary Resource view. Entered in a 24-hour format (i.e. 2030)
Resourcing.ResourceOnAttend	This setting allows you to validate if the resource is still available upon attendance and display an appropriate message to the user. Selecting Y allows the user to ignore (i.e. override) the resource requirement if applicable.
Resourcing.SlotLength	Allows you to specify the length of slot (in mins) which will be displayed via the diary view
Resourcing.StartTime	Allows a default start time to be displayed via the diary viewer (i.e. 0830)

PERSONNEL MODULE SECURITY SETTINGS

The following security settings are required to access the Resource Management Module. HSS recommend that the Trust create a new **ACTIVITY** Group called **MODRES = Resource Management Module**. You should then assign **MODRES** Activities to all relevant ROLES. This can be undertaken via **TABLES > PEOPLE > SECURITY SETTINGS**.

In this way during a pilot phase of the Resource Management Module each individual user can just have the **MODRES** Activity assigned to their existing Userids via Staff Tables and [Edit Group]. Then when the Trust / Site are ready to go live with the Resource Management Module you can assign the Activity MODRES to all relevant ROLES to activate this for all appropriate users.

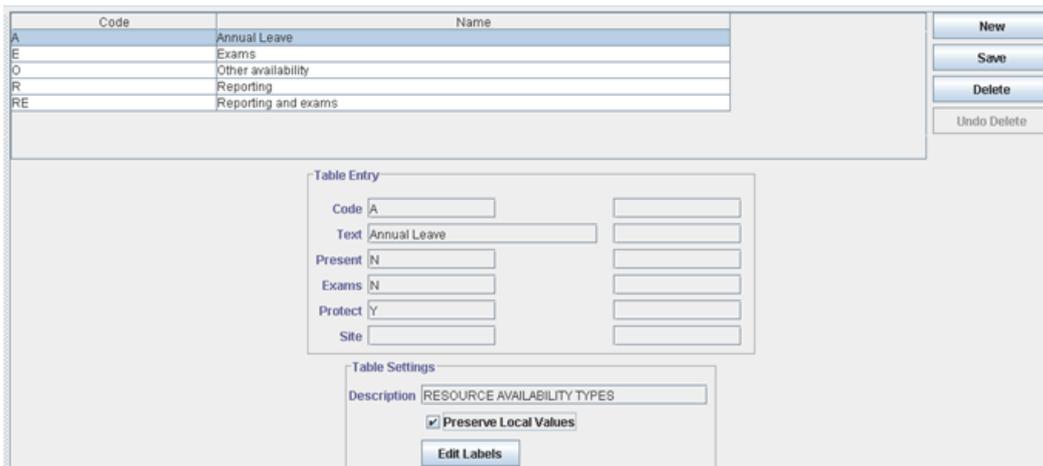
The use of Activities rather than simply adding security settings to each role makes it much easier update the Resource Management Module with any new security settings which are associated with future module developments.

Section	Item	Description
GENERAL	CREATE_AV	Allows the user to create resource availability items
GENERAL	CHANGE_AV	Allows the user to change resource availability items
GENERAL	DELETE_AV	Allows the user to delete resource availability items
GENERAL	CREATE_USE	Allows the user to add a resource requirement via an event. Default resource use items will be added regardless of this setting
GENERAL	CHANGE_USE	Allows the user to change resource requirements via an event. Updating the date and time of a resource (i.e. booking it) will occur regardless of this setting, and setting the ignore flag does not require this permission.
GENERAL	DELETE_USE	Allows the user to delete resource requirements via the event
VIEWS	RESOURCES	Allows access to the overall Resource and Personnel Management module, and resource management set-up tables.

Resource Management Module Table Configuration

NORMAL TABLE SETUP - CRISRAVT

The **CRISRAVT** is a 'Normal Table' which is used to define all type of availability / commitment, which can be anything from available for reporting, to performing exams or annual leave. This table will typically need to be configured when introducing the Resource Management module but will not regularly require any updates unless a new category is required at a later date.



It should however be noted that this is a system wide table (i.e. Consortium level) so any entries must be agreed with all relevant RIS Administrators. Any amendments to this table should be marked '**Preserve Local Values**' to ensure that they are maintained in any subsequent system updates.

To set-up all required scheduling category codes go to TABLES > SYSTEM TABLES > NORMAL TABLES then navigate to, and select the CRISRAVT table.

1. Click [New] and enter the following details:

Field	Description
Code	Use this field to define the required category codes (i.e. A = Annual Leave, E = Exams, RE = Reporting and Exams etc.) <u>Please note:</u> This table has a maximum of 8 characters which you should not exceed under any circumstances, as this will have result in the Personnel Module failing to function.
Text	Enter a description of the category name which will appear in the [F4] prompt when in the main resource scheduling module <u>Please note:</u> This field has a maximum of 128 characters which you should not exceed.
Present	Enter Y(es) or N(o) to identify if the resource is available within the hospital when assigned this category (i.e. Annual Leave should be marked as N)
Exams	Enter Y(es) or N(o) to identify if the resource is available to perform examinations when assigned this category (i.e. Reporting may be marked as N, but Examinations and Reporting as Y)

Protect	Enter Y(es) will automatically select the 'Repeat Delete Protected' flag via the main resource scheduling module in order to prevent this category being overwritten by any scheduling amendments. (i.e. No one would be able to copy an alternative scheduling category over the top of existing annual leave)
Site	Enter Y(es) to force a user to enter a site when allocating this category, N(o) to prohibit the entry of a site, and leave Blank to allow the user the choice to enter a site or not. This is useful as Annual leave may be marked as N since the resource will be absent from all sites (i.e. the Trust), but Examinations should be marked as Y as you can only perform examinations at one site at any given time. <u>Please note:</u> This means that Personnel Categories are System Wide, however given the number of characters allowed it would be possible to prefix all codes with a hospital code, so long as the personnel code does not exceed 8 characters.
Preserve Values	Local You should ensure that you tick this box once you have created any bespoke codes in order to ensure that this table is not overwritten in any future system updates.

- Click [Save] to complete the creation of the new category.

You can subsequently edit any part of the category except the code should the need arise in future. HSS do not however recommend the use of [Delete] unless you are removing a code that you have only just added and reconsider, not a code which could conceivably have become available and become in use within the system.

CREATING A RESOURCE GROUP

Resource Groups are groups of available staff / resources (i.e. CT Radiographers – a group that consists of all Radiographers who can perform CT examinations). Resources can belong to multiple groups at any time. When allocating a resource group to an examination, you can then either manually allocate the individual resource or allow CRIS to assign this automatically based on staff availability.

When defining resource groups, you should consider all types of groups required to undertake a procedure (i.e. CT Radiographer, Radiographic Assistant) as each group can then be separately allocated at the time of vetting, booking or attending the event.

To create a Resource Group for use via the Personnel Management System, go to **TABLES > PEOPLE TABLES > RESOURCE GROUPS**

- Click the [New] button to create a Resource Group and enter the following details:

Code	<input type="text" value="CRADIOG"/>	Trust	<input type="text" value="HSS"/>
Name	<input type="text" value="CT RADIOGRAPHERS"/>	Site	<input type="text"/>
Description	<input type="text" value="CT PROCEDURES"/>	End Date	<input type="text"/>

Field	Description
Code	Enter the unique code for the group being created
Trust	Enter the Trust code which the group belongs
Name	Use this field to identify the group being setup (i.e. Radiologists, Radiographers, or Nurses etc.) which will appear in the [F4] prompt
Site	Enter a site code if the group is site specific or leave blank if this group is applicable across multiple sites
Description	Enter a description of the purpose of the group if applicable (i.e. CT Procedures vs. CT Reporting)
End date	If the resource group is no longer in use, type an end date.

2. Click [Save] to complete the creation of the new group.

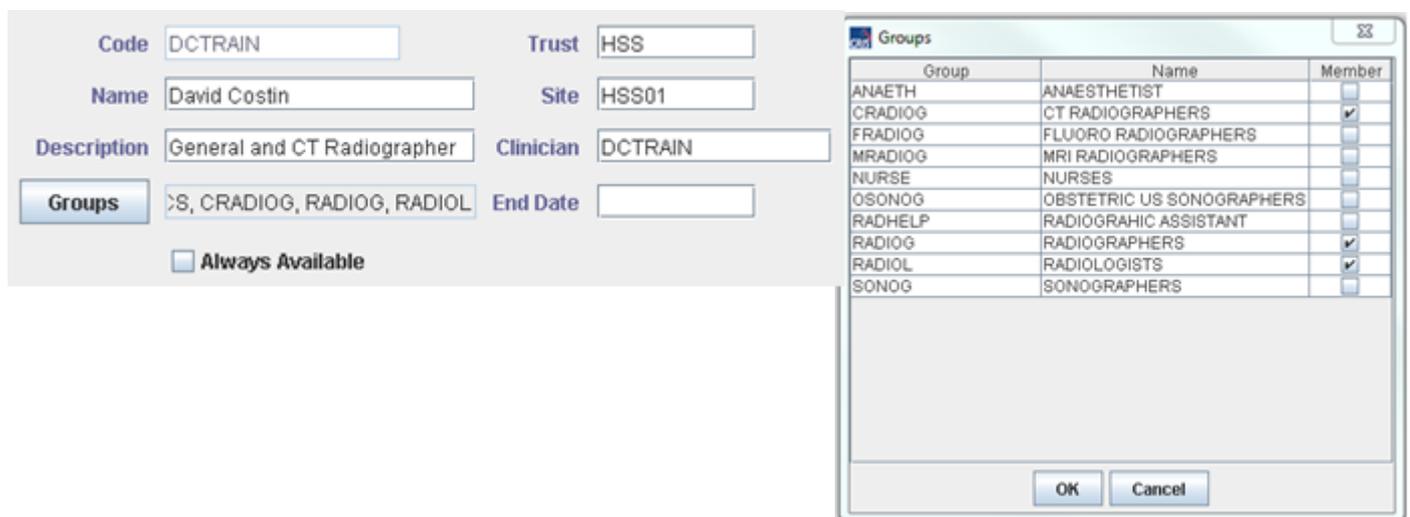
You can subsequently edit any part of the category except the code should the need arise in future. HSS do not however recommend the use of [Delete] unless you are removing a code that you have only just added and reconsider, not a code which could conceivably have become available and become in use within the system. HSS would instead recommend the use of the end date.

CREATING A RESOURCE

Resources represent clinical personnel who are specifically required to perform examinations (i.e. Radiologist or Sonographer) or any other kind of requirement (i.e. Radiographic assistant, or equipment such as mobile imaging) for an examination. A resource may belong to several groups and can be allocated individually or automatically by CRIS according to availability.

To create a Resource for use via the Personnel Management System, go to **TABLES > PEOPLE TABLES > RESOURCE**

1. Click the [New] button to create a Resource and enter the following details:



The screenshot shows the 'Resource' creation form with the following fields filled in:

- Code: DCTRAIN
- Trust: HSS
- Name: David Costin
- Site: HSS01
- Description: General and CT Radiographer
- Clinician: DCTRAIN
- Groups: >S, CRADIOG, RADIOG, RADIOL
- End Date: (empty)
- Always Available

Overlaid on the form is a 'Groups' dialog box with the following table:

Group	Name	Member
ANAETH	ANAESTHETIST	<input type="checkbox"/>
CRADIOG	CT RADIOGRAPHERS	<input checked="" type="checkbox"/>
FRADIOG	FLUORO RADIOGRAPHERS	<input type="checkbox"/>
MRADIOG	MRI RADIOGRAPHERS	<input type="checkbox"/>
NURSE	NURSES	<input type="checkbox"/>
OSONOG	OBSTETRIC US SONOGRAPHERS	<input type="checkbox"/>
RADHELP	RADIOGRAPHIC ASSISTANT	<input type="checkbox"/>
RADIOG	RADIOGRAPHERS	<input checked="" type="checkbox"/>
RADIOL	RADIOLOGISTS	<input checked="" type="checkbox"/>
SONOG	SONOGRAPHERS	<input type="checkbox"/>

Field	Description
Code	Enter a code to identify the resource. HSS would recommend using the existing CRIS Login ID, or you should ensure that you use the Clinician ID if this is different to Login ID if you wish to use Reporting Groups. Reporting Groups will not function if the Resource Code and Clinician code are different.
Name	Enter the full name of the human resource being created, or alternative a description of the type of resource (i.e. Mobile Imager 1)
Description	Enter the description of the resource (i.e. General and CT Radiographer or Mobile Imaging) Used to identify what type of resource the person is i.e. Radiologist, Radiographer Nurse etc.
[Groups]	Click the [Groups] function button to assign the resource to all relevant groups via the 'Groups' selection dialogue box
Trust	Enter the Trust the resource is associated with
Site	Enter the Site the resource is primarily associated, or leave blank if they would equally at more one site.
Clinicians	If the human resource being setup on the system already has an existing 'Clinician' code, ensure that this is entered in order to facilitate the auto assignment of the resource when the 'Required Clinician' field is completed via the Event Details or Vetting screens.
End Date	If the resource is no longer in use, type an end date.
Always Available	<p>This function is designed to indicate that the individual resource is exempt from Appointment Scheduling – i.e. When the resource module is being used to assign groups for Vetting and Reporting purposes but not scheduling via the CRIS Appointments module. This is also useful for equipment.</p> <p>Selecting this option negates the need to create /maintain daily resource schedule for items which are either always available or exempt from scheduling. This can be helpful for human resources who are typically available for any required examinations when on shift and do not have any specific additional commitments or restrictions as it still possible to create periods of unavailability (i.e. Annual Leave, Teaching or Equipment service).</p>

- Click [Save] to complete the creation of the new resource.

You can subsequently edit any part of the category except the code should the need arise in future. HSS do not however recommend the use of [Delete] unless you are removing a code that you have only just added and reconsider, not a code which could conceivably have become available and become in use within the system. HSS would instead recommend the use of the end date.

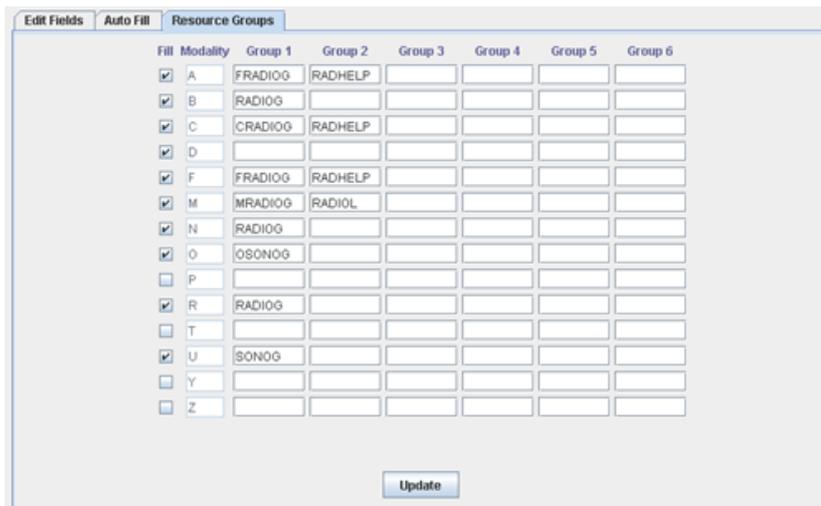
CONFIGURING EXAMINATIONS THAT REQUIRE RESOURCES

The Exams per Hospital now includes Resource Group fields for use in conjunction with the Resource Management module. Consequently, to facilitate assigning resources to examinations it will be necessary to specify which resource groups are required to perform the examination for all relevant sites via this table.

MAKING USE OF THE RESOURCE GROUPS AUTO FILL UTILITY

The simplest method of configuring this is to utilise the 'Resource Groups' function by entering the relevant hospital code via the 'Site' field at the top of the Exams Per Hospital screen and clicking the 'Resource Groups' tab before ticking each appropriate modality.

Enter the appropriate 'Groups' (1 – 6 as applicable) for each modality by typing directly or pressing [F4] to select from a list of options.

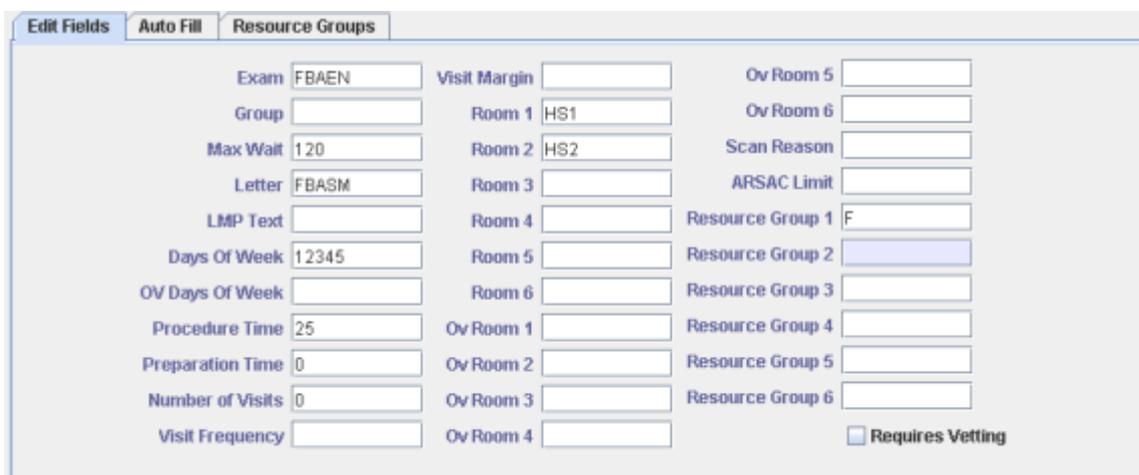


Fill Modality	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
<input checked="" type="checkbox"/> A	FRADIOG	RADHELP				
<input checked="" type="checkbox"/> B	RADIOG					
<input checked="" type="checkbox"/> C	CRADIOG	RADHELP				
<input checked="" type="checkbox"/> D						
<input checked="" type="checkbox"/> F	FRADIOG	RADHELP				
<input checked="" type="checkbox"/> M	MRADIOG	RADIOL				
<input checked="" type="checkbox"/> N	RADIOG					
<input checked="" type="checkbox"/> O	OSONOG					
<input type="checkbox"/> P						
<input checked="" type="checkbox"/> R	RADIOG					
<input type="checkbox"/> T						
<input checked="" type="checkbox"/> U	SONOG					
<input type="checkbox"/> Y						
<input type="checkbox"/> Z						

Having done this simply click the [Update] function button to auto fill the Exams per Hospital examination table for the site you have selected. This will need to be repeated for all relevant sites as required.

CONFIGURING RESOURCE GROUPS AT EXAMINATION LEVEL

It is also possible to configure the required resources at an individual examination level, via the standard 'Edit Fields' table. This may be more suitable when undertaking an initial pilot of the module, or if only a handful of examinations have a specific resource requirement. You can also use this functionality to amend individual examinations which have differing resource group to the majority of examination following use of the Auto fill utility.



1. Locate the examination you require, either by selecting it from the overall list or by clicking on the first field 'Exam' and typing the relevant code.
2. Having done this click the 'Resource Group 1' field and amend or enter the required resource group by typing directly or pressing [F4] to display a list of options.
3. Repeat for an additional Resource Groups before clicking [Save].

Please note: Each resource entered will be validated as available when scheduling appointments, and it is therefore essential all resources have specified availability or it will not be possible to book an appointment via the diary.

HSS would therefore recommend concentrating on essential resources whose availability is limited or presence is absolutely required for the examination to be performed. Other resources can continue to be inferred (i.e. a Radiographer is needed but doesn't need to be named) rather than formally specified, unless you plan to create and maintain personnel schedules for every single member of staff / resource specified.

Document Control

Title	Resource Groups & Personnel Management Module		
Author	HSS Training Manager	Date Created	01/09/2009
File Ref.	CRIS_CRIB_IM_350_Resource Management Module_V3.0		
CRIS Version	2.09.10t1		
Change History			
Issue	Date	Author / Editor	Details of Change
V1.0	01/09/2009	David Costin	First Issue
V1.1	17/06/2010	Emma Savage-Mady	Amendments and restructuring due to software modifications and clarification of general functions.
V1.2	12/10/2010	Emma Savage-Mady	Minor Amendment to System Tables configuration to reference Resource Management Licensing.
V1.3	04/07/2011	David Costin	Amendments to version number for 2.09.10e
V1.4	31/10/2011	David Costin	Amendments to version number for 2.0910i
V2.0	20/06/2014	Emma Savage-Mady	First Issue for 2.09.10p
V3.0	10/08/2017	Emma Savage-Mady	Complete overhaul to document new Resource Groups in conjunction with single resource group per event. Removed reference to adding Resource Group Manually using [Resource] option as this is no longer supported with event resourcing.
Review Date		10/08/2019	