



The Radiology Information Solution

## **CRIS Statistical Reports**

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## CRIS Statistical Reports

To access the CRIS Statistical Reports system click the  which is located at the top of the screen.

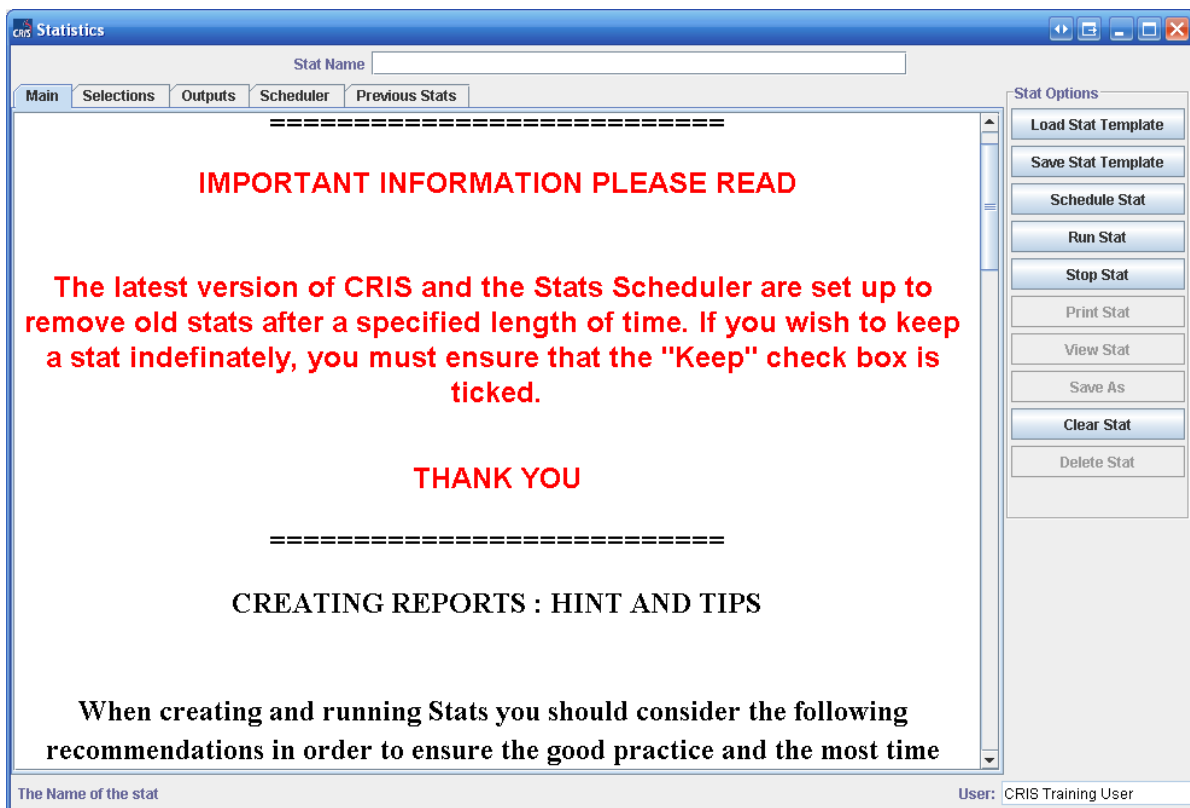
It is possible to use CRIS Statistical Reports to extract any information required for data analysis purposes and management/department of health returns. However in order to achieve the most effective results it is essential to have a clear idea of exactly what information you want to retrieve before creating the report extract.

### MAIN SCREEN

The new 'Main' tab / screen is now displayed when opening the statistical reporting module. This is designed as a Message Facility which can be used to broadcast Statistical Reports System Announcements, Useful Messages and other Information for users.

Statistical Reports Message can be set at SYSTEM, SITE, or USER specific levels by editing or creating the following Format:

MOD_JAVA_STATS	System Wide Message
MOD_SITE_SITECODE_STATS	Site/Hospital Specific Messages
MOD_USER_USERID_STATS	User Specific Message




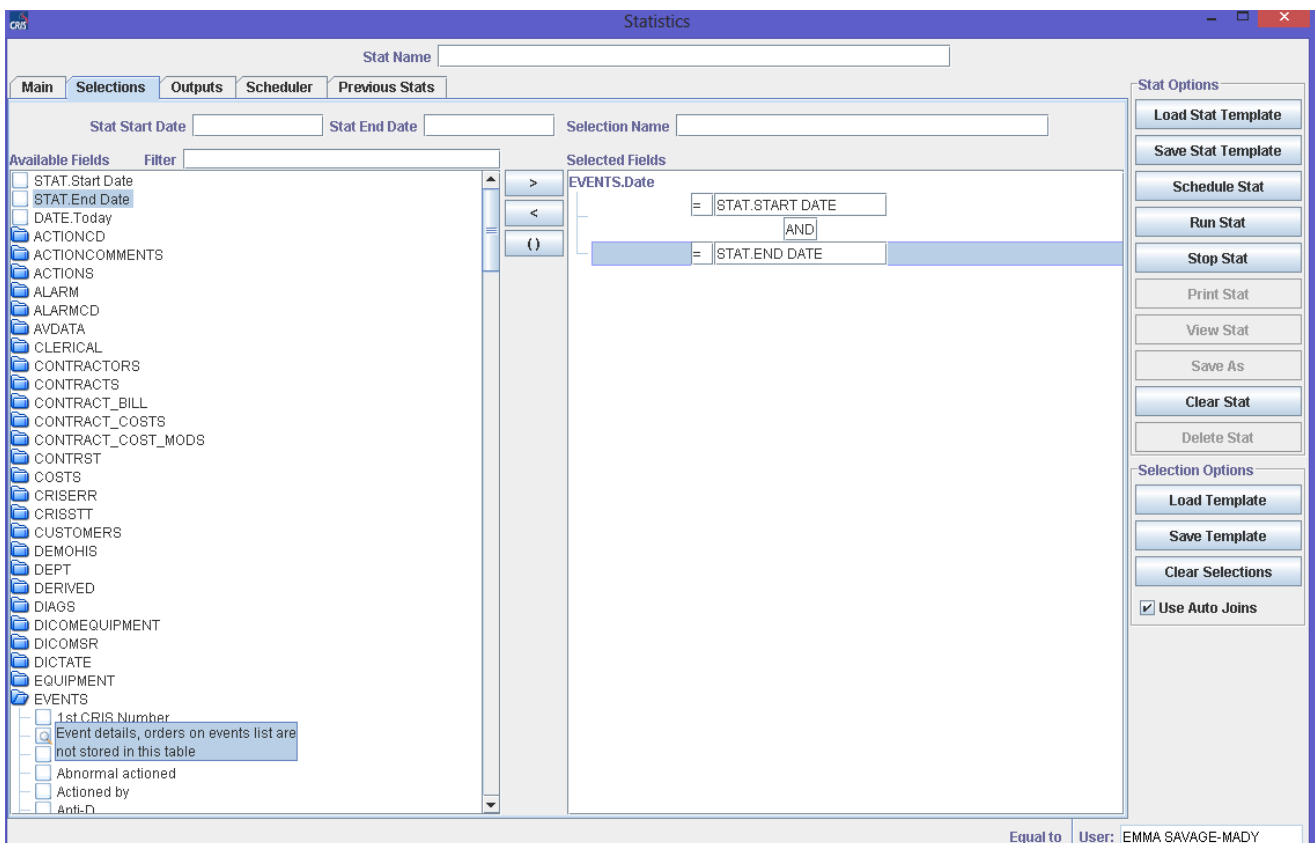
## MAKING SELECTIONS

The **SELECTIONS** tab of the 'Statistics' screen is used to specify what information you wish to query by selecting from any of the available fields – i.e. PATIENT.Surname.

**Please note:** All fields are displayed in the format TABLE.Field (e.g. TABLE / FOLDER = PATIENT then Field = Surname). This makes it easier to determine where fields have originated from when reviewing existing Statistical reports templates.

The left hand pane of the **SELECTIONS** section contains a list of all tables and fields contained in the CRIS database. Double clicking each CRIS table folder will display all available fields contained in each appropriate table – e.g. PATIENT, EVENTS etc. The folder icon indicates a TABLE whilst the blank document icon contained inside the folders indicate FIELDS. Using the mouse to hover over a Tables (Folder Icon) or Field within a Table will display a short description indicating its purpose.

Selections can be made on any 'Field' in any 'Table' so long as the appropriate joins are undertaken where applicable. Some selections will be however be processed quicker than others, and consequently to make it easier to identify fields that are indexed via the database these are now displayed with the  icon, to enable these fields to be prioritised where possible as they are likely to speed up the time taken to query the database.



To add a **FIELD** to your selections it is possible to either double-click the field, or highlight the field and click the [ > ] button situated between the 'Available Fields' and 'Selected Fields' panes.

**Please note:** If you have added a field by mistake, or just want to remove one from your selected fields, simply highlight the field you wish to remove from the 'selected fields' pane and click the [ < ] button, located just below the add field button. **New** - It is also now possible to use the 'Filter' text search box to find a particular field you require, simply by entering a key word and hitting [Enter] to search. This will then display all Tables and Fields which include the key word.

## FIELD OPERATORS & VALUES

Once you have selected a field two boxes will appear beneath it. The first is the **OPERATOR**:

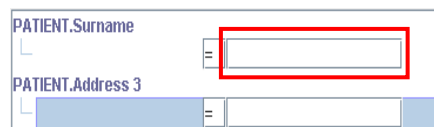


With the focus in the **OPERATOR** field press [F4] to specify one of the following (press [Enter] to retain the default value):

<	Less than
<=	Less than or equal
<>	Not equal to
=	Equal to (Default value)
>	Great than
>=	Greater than or equal
in	Field includes
ex	Field excludes
LJ	Left outer join
RJ	Right outer join

Not all of the above operators can be used for all types of fields; however CRIS will only display operators which are applicable to the field type selected.

The second box is **VALUE** of the field you plan to query:



In most cases pressing [F4] will also display a list of appropriate option unless this is a date or free text field value.

You can add as many selection fields to the list as required and create multiple values for the same field – i.e. all exams for MRI and CT - EXAMS.Modality = M and EXAMS.Modality = C (CT)

**New LEFT AND RIGHT OUTER JOINS** - The 'LJ' or 'RJ' operators are provided to allow left and right outer joins between fields in separate tables. These operators return all records from the first table, along with the relevant matching record from the second table. If there is no matching record in the second table, then NULL values are returned. In a left join the first table will be on the left, and the second table on the right, and vice versa for a right join.

## AND/OR VALUES

If you have selected multiple values it will also be necessary to specify if you wish to use a 'AND (Default)' or 'OR' clause.



**AND** Will display results for values in conjunction with each other not those which appear independently of each other - e.g. only where both a CT and MRI exam took place.

**OR** Will display results for either value irrespective of those which appear independently of each other – e.g. CT or MRI exams which took place on independent patients or dates etc.

When using an OR clause please be aware that it in order to run the stat it will be necessary to use ( ) brackets around the values by clicking the [ ( ) ] button situated between the 'Available Fields' and 'Selected Fields' panes. You should highlight the appropriate fields by holding down [Shift] and clicking each value before applying brackets.

Please note: If required brackets can be removed by clicking any of the brackets around the values and clicking the [ < ] Left Arrow to remove, or the [ ( ) ] brackets button.

## START & END DATE FIELDS

The Available Fields selection pane also includes **Start Date** and **End date** options at the top of the list. These are not used to enter a specific date but instead to indicate that you require any date fields added to use the overall Start and End dates which have been entered at the top of screen – i.e. to apply any date required negating the need to amend all date boxes independently should you wish to query a different date range.

To apply a Start or End date simply drag and drop it into the appropriate VALUE BOX.



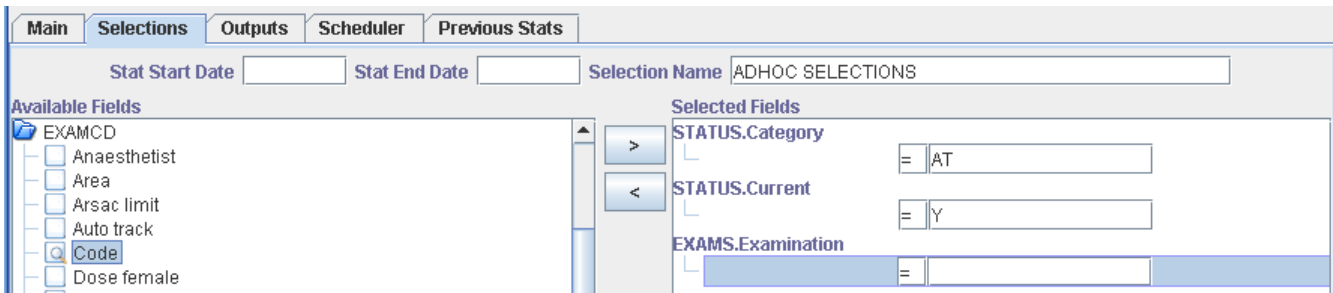
Having made all appropriate **SELECTIONS** you should proceed to the **OUTPUTS** section of the CRIS statistical reports system.

**New** - The CRIS system now also contains a **DATE.Today** option which can be used by dragging and dropping it in any date field to make the date default to today.

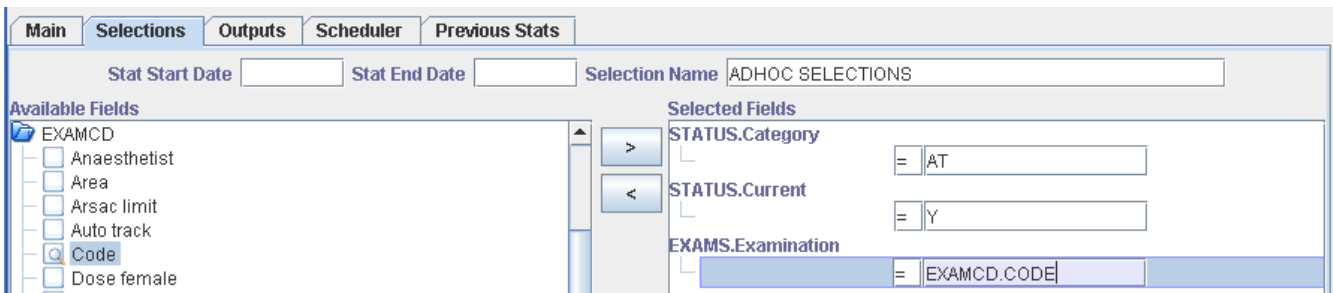
## JOINING CRIS TABLES

In some cases it will be necessary to create a JOIN between two tables to obtain accurate results or speed up the path the system takes through the database.

To create a join you should refer to the appropriate Tables via the [CRIS Database Schema Diagrams](#) (See page. 35 onwards) to establish which FIELDS to join together.



Having done this you should drag the required CODE field from the appropriate Table and drop this on the SELECTED FIELD. In this way it is possible to join two tables that do not otherwise have a direct relationship via the CRIS database. For example to JOIN EXAMS to the EXAM CODE tables Drag and drop the field (i.e. Code) to the Selected Fields box (i.e. EXAMS.EXAMINATION).



Please note: All fields are displayed in the format TABLE.Field (e.g. TABLE / FOLDER = PATIENT then Field = Surname). This makes it easier to determine where fields have originated from when reviewing existing Statistical reports templates.

## SAVING A SELECTION TEMPLATE

Once you have defined an appropriate set of SELECTIONS it is possible to save these as an **SELECTION TEMPLATE** which can be re-used in other Statistical Reports which you may run in the future by clicking the [Save Template] and [Load Template] buttons appropriately.

## SPECIFYING OUTPUTS

The **OUTPUTS** section of the system is used to specify what information you want to actually output – i.e. on screen, print or save to file in addition to creating Total lines, and indicate which order you wish to output information, and how the information should be grouped.

## NAMING AN OUTPUT

It is possible to specify any number of outputs which can then be named via 'Output Name' to enable more than one type of output to appear on a report. To add an additional output simply click on the [Add Output] button, or alternatively to remove select the relevant output and click the [Remove Output] button.

## CHOOSING AN OUTPUT TYPE

Once you have filled in an output name you must select either a **comma delimited** or **user friendly format**, or no stats results will be created.

**Comma delimited** CSV format which can be imported into other 3<sup>rd</sup> party system – i.e. EXCEL. When selected this file automatically saves to either C:\cris3\stats or C:\Documents and Settings\your\_user\_directory\stats by default. This directory can however be specified for each terminal, by using the STATS.LocalDirectory setting within the XR Settings setup – for example: C:\cris3\stats.

**User friendly** Standard on screen or printed user friendly output which can be used in conjunction with the remaining two formatting options “fit to page” and “small text” are only applied to the user friendly output when they are selected.

**Show Selections** This option can be applied to either comma delimited or user friendly format to provide a record of the selections applied (i.e. Report Criteria) for reference purposes.

**Fit To Page** Used for **printing only** to facilitate an A4 portrait or landscape output which includes word wrapping which is applied according to the total width of the report.

Please note: If this option is not selected when printing some text may be cut off or omitted completely.

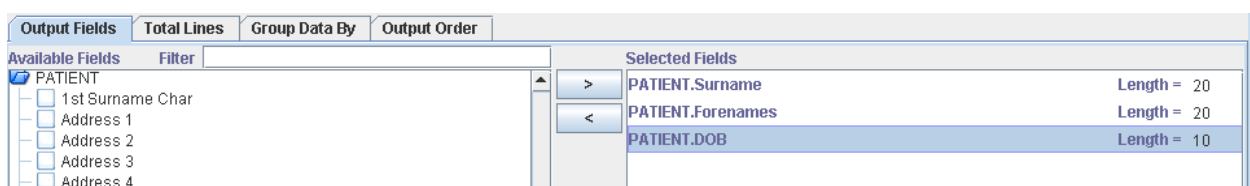
**Small Text** As the name implies if this option is applied the text font size is reduced so more text can be made to fit on a page. This is useful if the width of the output is only a little longer than an A4 page, as it may mean no line wrapping will be applied.

## OUTPUT FIELDS

The OUTPUTS screen contains 4 [TABS] – **OUTPUT FIELDS**, **TOTAL LINES**, **GROUP DATA BY** and **OUTPUT ORDER** as follows:

### OUTPUT FIELDS (I.E. COLUMNS OF DATA)

This option enables you to specify which fields you wish to display on screen, print-out or send to file. These are effectively the **COLUMNS OF DATA** which will be displayed on screen, or exported. To add a **FIELD** to your Output Fields open a Folder (i.e. Patient) and then highlight the field (i.e. Surname) and either double-click the field, or click the [ > ] button situated between the ‘Available Fields’ and ‘Selected Fields’ panes.

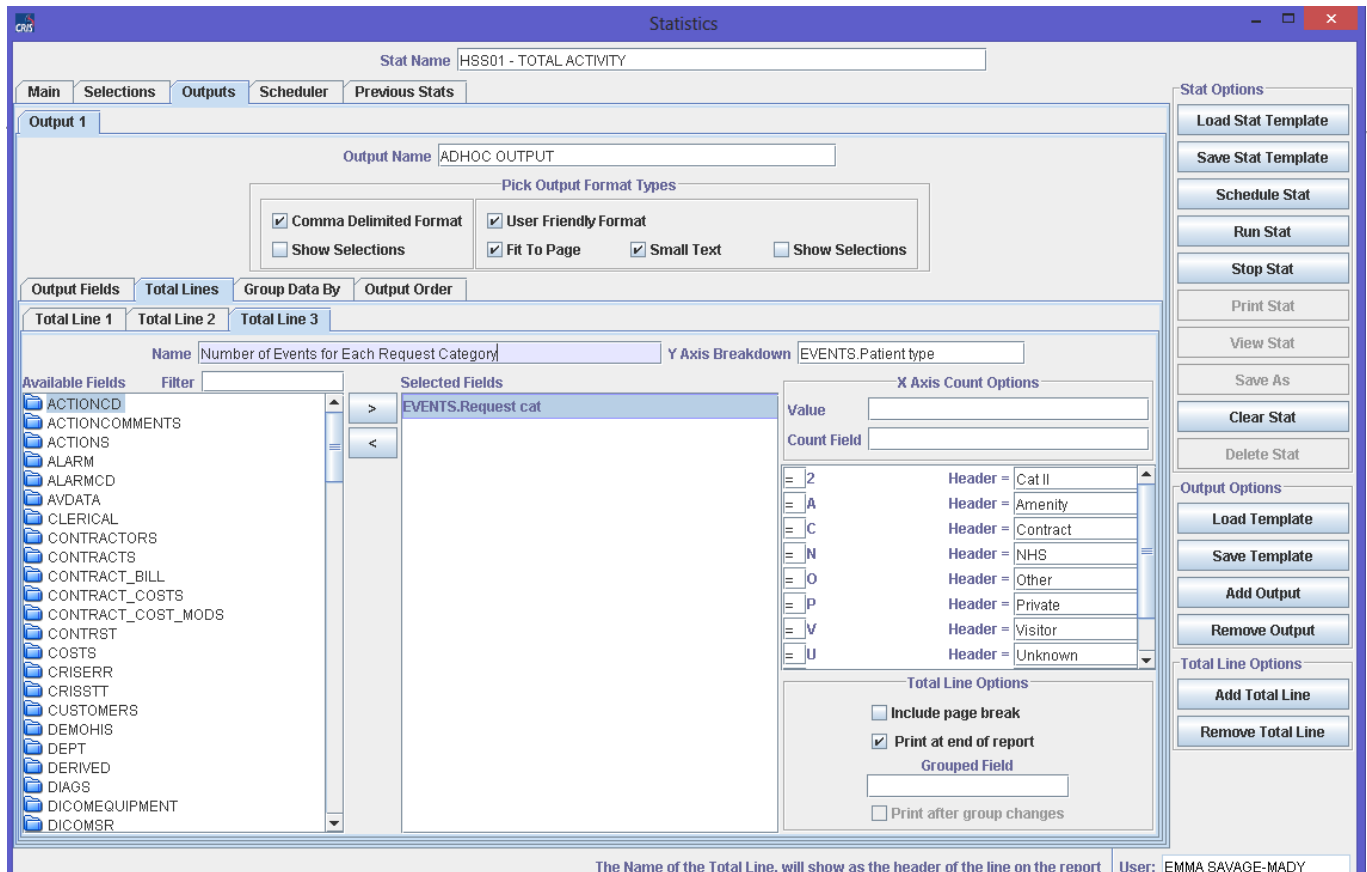


Having selected a field it will appear in the 'Selected Fields' column with a width value next to it. This is the number of characters width to make the column. There is a default size of the field which will be filled in when you first select the field, but you can change it by clicking on the number and typing a different value in. If the width is not large enough to accommodate all the text in a result, only the first characters of the result will be displayed, up to the value of the width specified, the rest will be stripped off the result.

Please note: It is now possible to use the **New** - 'Filter' text search box to find a particular field you require, simply by entering a key word and hitting [Enter] to search. This will then display all Tables and Fields which include the key word.

## TOTAL LINES

These are the numerical counts that can be output onto a Statistical report in order to provide total figures for any required Output Fields.



CRIS Total Lines allow you to specify up to **THREE TYPES OF TOTALS** using **Y AXIS BREAKDOWN** (Formerly *Datafields*), **X AXIS COUNT OPTIONS** (Formerly *Count Options*) and **GROUPED FIELD**.

Y Axis Breakdown outputs totals 'Vertically', Count Values in X Axis Count Options output totals 'Horizontally' and Grouped Field can be used to generate subtotals (if required).

>>> X AXIS COUNT OPTIONS >>>

>>> Y AXIS BREAKDOWN >>>

GROUPED FIELD (SUBTOTALS)

## NAME (TOTAL HEADING)

It is also possible to give the total line a name which will be output as a header to the total line.

## SELECT AVAILABLE FIELDS

You should select from the list of Tables and Fields and add the appropriate option in the same way as assigning 'OUTPUTS' but it is important to carefully consider what kind of data totals you are trying to produce.

For Example - If you wanted to count the **"Number of Examinations for Patients under 16 and over 70"** - you would need to use the **EXAMS.Exam Name field (Y AXIS)**, in conjunction with the **PATIENT.Age At Event field (X AXIS)** and count using **DERIVED.No Of Exams (X Axis Count options)** to ensure all procedures are counted for patients < (less than) 16 and >= (greater or equal to 70).



## Y AXIS BREAKDOWN OPTIONS

CRIS Y Axis Breakdown enables you to select a Table and Field which will then display Totals VERTICALLY down the screen. This method is recommended for larger tables as information is outputted automatically rather than it being necessary to manually enter these details as per X Axis Count Field options.

For example - Selecting **EXAMS.Exam Name** will the print all Examination names automatically followed by Totals for each category as specified via the X Axis.

## X AXIS COUNT OPTIONS

CRIS X Axis Count Options display Totals HORIZONTALLY across the screen but you will need to enter these values manually.

In this example you would add **PATIENT.Age At Event** and type 16 in the Value field before pressing [Enter] which will add a line to box below. The cursor should now be displayed in the 'Count Field'. You should press [F4] to display the prompt list and select **DERIVED.No Of Exams** via the count field. Having done this click on the = (**Equal to**) operator and press [F4] to display the prompt list before changing to < (**Less than**) for Patients under 16.

You will then need to repeat this exercise for Patients over 70 by clicking to return to the **Value** field and typing **70** followed by pressing [Enter]. This time it will not be necessary to enter the Count field as has defaulted from the first entry, you only need to change the **Operator to >= (Greater or equal to)** for Patients over 70.

## COUNT FIELD OPTIONS (DERIVED VALUES)

If the SELECTIONS and OUTPUTS you have specified are likely to create multiple results for each FIELD you want to count you should use the 'Count Field' and should press [F4] to display a list of options.

**Example 1** - If you want to COUNT THE NUMBER OF EXAMS per modality/department reported by each Reporting Consultant you should choose 'DERIVED.No Of Exams' as this will ensure that the system counts all exams/procedures which took place during an event/attendance.

**Example 2** - If you are want to COUNT THE NUMBER OF EVENTS (Requests / Attendances) for Patients under 16 and over 70 but have specified an Exams output from the Exams Table the CRIS system would output multiple results for each Exam on the Event, as each Event/Request could have multiple exams.

Consequently to ensure that the CRIS System only counts results for each unique Attendance not one for each exam the patient has had, you should choose the 'DERIVED.Unique Events'. This is to ensure that the CRIS System only counts a result when the system encounters a new event which it has not already encountered, as a pose to counting the number of all the results output irrespective of if the overall Event/Attendance appears in the results more than once.

It is therefore recommend that you should always complete an appropriate value in the count field to control the calculations are correct for the context.

## DERIVED 'COUNT FIELD' DEFINITIONS

DERIVED VALUES	DEFINITION
DERIVED No. of Event Procedures	<b>Total No. of Exams (Procedures) per Event</b> - This count field Subtotals the No. of Exams (i.e. Procedures) for each event.
<b>DERIVED No. Of Exams (No. of Procedures)</b>	<b>Number of Exams</b> – When using this count field totals are calculated based on the no. of exams field for each Examination code. For example: the CT Abdo Pelvis is entered as one examination code but

	this is counted as 2 procedures via the no. exams field.
<b>DERIVED Unique Events (No. of Requests/Visits)</b>	<b>Number of Unique Events</b> – When using this count field totals are calculated based on each unique Event (i.e. Requests) counting it just once regardless of the number of records held against the remainder of the Event – i.e. exams, reports, status records etc.
<b>DERIVED Unique Exams (No. of Exam Codes)</b>	<b>Number of Unique Exams</b> – When using this count field totals are calculated based on each unique Exam (code) counting it just once regardless of the number of records held against the remainder of the Event – i.e. reports, status records etc.
<b>DERIVED Unique Patients (No. of Heads)</b>	<b>Number of Unique Patients</b> - When using this count field totals are calculated based on each unique Patient (record) counting it just once regardless of how many exams/requests a patient may have had during the date range specified.
<b>DERIVED Unique Reports (No. of Typed Sections)</b>	<b>Number of Unique Reports</b> - When using this count field totals are calculated based on each unique Report. You should however be aware that Clinical History is counted as one report – For Example: A report with Clinical History with 2 exams each reported individually this would be counted as 3 reports.
<b>EXAMCD Radiologist Units</b>	<b>Radiol Units</b> – Adds together the values from the Examination Codes Tables > Radiol Unit field for the exam results returned.
<b>EXAMS.Attendance to Verified (Days)</b>	<b>Average Days from Attendance to Verification.</b>
<b>EXAMS.Attendance to Verified (Hours)</b>	<b>Average Hours from Attendance to Verification.</b>
<b>EXAMS.Attendance to Verified (Mins)</b>	<b>Average Minutes from Attendance to Verification.</b>
<b>EXAMS Default Exam Length</b>	<b>The default Length of Time the Exam code takes to Perform</b> – When using this count field totals are calculated based on the Default procedure time for the exam at the site (via Exams Per Hospital). If this is blank, then the default total for the exam is taken to be the real time field of the Examination Codes table.
<b>EXAMS Exam Length</b>	<b>Length of Time the Exam Took To Perform</b> – When using this count field totals are calculated based on the Total Time that all examinations took to perform per Room. This total is usually applied in Room Utilisation statistics. Please note: The accuracy of these totals is based on Post processing Start and End times.
<b>EXAMS Korner Value</b>	<b>Korner Value Count</b> – When using this count field totals are calculated based on each on the Korner Value of the Exam. For Example – If the Korner Value on exam is B – it would be counted once and if the Korner Value is 2B twice.
<b>EXAMS Korner Weighting</b>	<b>Korner Weights</b> – Adds together the values from the Examination Codes > Korner Weight field for the exam results returned.



<b>EXAMS No. of DNA's</b>	<b>No of DNA's</b> – Totals number of DNA's per procedure (i.e. No. of Exams) using auto DNA's (i.e. APDNA) and vetted DNA's (PATDNA).
<b>EXAMS Quantity Used</b>	<b>Contrast Quantity Used</b> – Calculates the Total figure entered via the Contrast field in the Post Processing Screen.
<b>EXAMS.Total cost (Billed)</b>	<b>Total Cost Billed</b> – Sum of the total Exam costs relevant to whether it was performed in or out of hours derived from the Costs > Examination Table.
<b>EXCOST In Hours Cost</b>	<b>The cost of exams performed in hours</b> - When using this count field totals are calculated on the cost of the exams performed within normal working hours.
<b>EXCOST Out Hours Cost</b>	<b>The cost of exams performed out of hours</b> - When using this count field totals are calculated on the cost of the exams performed outside normal working hours.
<b>EXCOST Total Costs</b>	<b>The cost of exams performed</b> - When using this count field totals are calculated on the cost of the exams depending on whether they were performed in or out of hours.
<b>Please note:</b> The above Costs Count fields are for use with the standard CRIS Examination Costs Tables, not the CRIS Advanced Billing Module.	
<b>Billing Data.Billing Cost</b>	<b>Total Billing Soft Form Cost.</b>
<b>POSTEXM No Rejected</b>	<b>Number of Rejected Films</b> - Entered via Post Processing.
<b>POSTEXM No Used</b>	<b>Number of Films Used</b> - Entered via Post Processing.
<b>PREG.Number of Foetuses</b>	<b>The number of foetuses associated with a pregnancy</b> – Generated by the use of 'Add Foetus' via Obstetrics Ultrasound reporting module.
<b>ROOM Slot Length</b>	<b>Length of Slot</b> – When using this count field totals are calculated based on the length of allocated Diary Slot – i.e. How much the time allocated in the diary vs Exam Length – how much time was actually used – Capacity.
<b>SYRINGE Act Disposed</b>	<b>Activity Disposed</b> - When using this count field totals are calculated based on the Mbq disposed from the syringe.
<b>SYRINGE Act Inj</b>	<b>Activity Injected</b> - When using this count field totals are calculated based on the Mbq Injected and entered via the [Add injection] functionality. This total is not for use in wastage reports.
<b>SYRINGE Total Wasted</b>	<b>Activity Wasted</b> - When using this count field totals are calculated based on the Mbq of Injected activity that are wasted.
<b>SYRINGE Waste &amp; Disposed</b>	<b>Activity Wasted &amp; Disposed</b> - When using this count field totals are calculated based on the Mbq of Injected activity that is wasted in addition to the amount of activity disposed.
<b>ADVANCED BILLING MODULE ONLY</b>	
<b>CONTRACT_BILL.Gross Total</b>	<b>Gross Total</b> – Subtotal of CONTRACT_BILL.CONTRACT_BILL_COST and CONTRACT_BILL.VAT.



<b>CONTRACT_BILL.Net Total</b>	<b>Net Total</b> – Subtotal of CONTRACT_BILL.CONTRACT_BILL_COST.
<b>CONTRACT_BILL.Vat Total</b>	<b>VAT Total</b> – Subtotal of CONTRACT_BILL.VAT.
<b>INVOICES.Gross Total</b>	<b>Gross Total</b> - Subtotal of the cost including VAT of all contract bills for a given invoice.
<b>INVOICES.Net Total</b>	<b>Net Total</b> - Sum of the cost excluding vat of all contract bills for that invoice.
<b>INVOICES.TotalProcedure</b>	<b>Total Number of Invoiced Procedures</b> - Subtotal of INVOICES.NO OF PROCS. INVOICES.NO OF PROCS which is the subtotal cost of the no of procedures for each contract bill in the invoice.

## FIELD OPERATORS & VALUES

Once you have selected a 'Count Field' option two boxes will appear beneath it. The first is the **OPERATOR** used to specify one of the following:

<	Less than
<=	Less than or equal
<>	Not equal to
=	Equal to (Default value)
>	Great than
>=	Greater than or equal
in	Field includes
ex	Field excludes

Either press [F4] and selection and option from the list, or hit return if you require the default value which is = equal to.

The second box is HEADER of the Total Item you wish to output and you should therefore enter an appropriate header for each 'Count Field' to display above total column on the output.

For example - If you wanted to count Patients under 16 and over 70 you should enter two count fields with the following values "<" (less than) for the 16 value and ">" (greater than) for the 70 value.

## AMENDING COUNT FIELDS

Should you wish to amend the type of 'Count Field' currently in use via an existing Total Line, it is now possible to highlight all values and simultaneously amend the 'Count Field' for the entire selection rather than having to amend each value separately as was previously the case – i.e. to Change from Derived.No. of Exams to Derived.Unique Events.

**X Axis Count Options**

Value: 10

Count Field: DERIVED.NO OF EXAMS

= 10	Header = 10<11
= 11	Header = 11<12
= 12	Header = 12<13
= 13	Header = 13<14
= 14	Header = 14<15
= 15	Header = 15<16
= 16	Header = 16<17
= 17	Header = 17<18
>= 18	Header = 18 +

**X Axis Count Options**

Value: 10

Count Field: DERIVED.UNIQUE EVENTS

Save As

Clear Stat

Field	Name
DERIVED.NO OF EXAMS	Number Of Exams
DERIVED.UNIQUE EVEN...	Number Of Unique Events
DERIVED.UNIQUE EXAMS	Number of Unique Exams
DERIVED.UNIQUE PATIE...	Number of Unique Patients
DERIVED.UNIQUE REP...	Number of Unique Reports
EXAMCD.RADIOL UNITS	Radiologist Units Exam Requires
EXAMS.DEFAULT LENG...	Default Length of exam total
EXAMS.EXAM LENGTH	Length of Time Exam Took
EXAMS.KORNER VALUES	Korner Value Count
EXAMS.KORNER WEIGH...	Total Exam Korner Weights
EXAMS.QUANTITY USED	Contrast Quantity Used
EXCOST.IN COST	Total In Hours Cost

## TO REMOVE A COUNT FIELD

Should you wish to remove a 'Count Field' either in the event it was added in error, or simply to remove the value right click the field and choose [Remove].

Multiple fields can now also be removed simultaneously by highlighting all the required values, and right clicking and selecting 'Remove'.

**X Axis Count Options**

Value: 10

Count Field: DERIVED.NO OF EXAMS

Save As

Clear Stat

Field	Name
DERIVED.NO OF EXAMS	Number Of Exams
DERIVED.UNIQUE EVEN...	Number Of Unique Events
DERIVED.UNIQUE EXAMS	Number of Unique Exams
DERIVED.UNIQUE PATIE...	Number of Unique Patients
DERIVED.UNIQUE REP...	Number of Unique Reports
EXAMCD.RADIOL UNITS	Radiologist Units Exam Requires
EXAMS.DEFAULT LENG...	Default Length of exam total
EXAMS.EXAM LENGTH	Length of Time Exam Took
EXAMS.KORNER VALUES	Korner Value Count
EXAMS.KORNER WEIGH...	Total Exam Korner Weights
EXAMS.QUANTITY USED	Contrast Quantity Used
EXCOST.IN COST	Total In Hours Cost

## GROUPED FIELD (SUBTOTALS) - OPTIONAL


It is possible to subtotal Stats results using a combination of 'Group Data By' and the 'Grouped Field' via 'Total Lines'. This is an optional function which is only required if you need to count on a 3<sup>rd</sup> category, or subtotal your data for ease.

## GROUP DATA BY

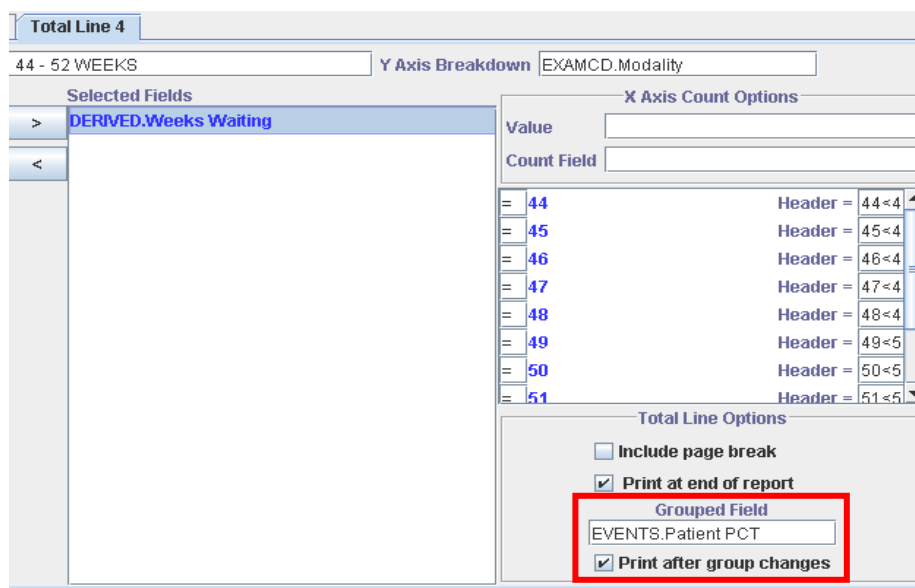
The 'Group Data By' Tab is used to specify how you would like to Group Data for output for use in conjunction with the 'Group Field' via the Total Lines screen. This will result in the output of a total line after each change in the value of the grouped field (e.g Totals for Dr Smith, then Dr Jones).

If a separate totals output is not required after each group has changed this section is not required otherwise the grouped selection will take priority over the overall 'Output Order'.

To utilise subtotalling begin by specifying the 'Selected Field' you wish to subtotal by via the 'Group Data By' screen.



Having done this return to 'Total Lines' and tick the '**Print after group changes**' box. Having done this click on the 'Grouped Field' box and press [F4] to select from the available fields you specified in Point 1.



**REMOVING/DISABLING SUBTALLING** – If you wish to remove/disable subtotalling untick 'Print after group changes' and remove/delete the value via Grouped Field on each Total Line.

This is particularly useful on a number of the Standard CRIS Statistical Reports Templates which are subtotaled by 'PCT' by default. You can therefore return to an overall total simply by unticking 'Print after group changes' and removing/deleting the value via Grouped Field on each 'Total Line'.

## PRINT AT END OF REPORT

Once you have completed the count values of the total line it is necessary to tick the "Print at end of report" as this will ensure that the total line outputs on the screen itself. Alternatively you can untick this if you want to only use total lines occasionally – i.e. Tick when you want to run / see totals, untick when you only want Output Fields / Data.

## PAGE BREAK

The final check box in the total line options will include a 'Page Break' after each total line has been output, so the rest of the report will continue on the next page.

## OUTPUT ORDER (SORT BY)

It is possible to order the results by any field which is the equivalent of 'Sort By' – i.e. EVENTS.Site, EVENTS.Date, EVENTS.Time. This will change the default order of the results which is usually determined by the first field on the Output Selections. Once a field has been selected, you can choose if you want the field ordered in ascending 'Asc' order or by descending order 'Desc'. If ascending order is selected, then the results with the lowest value of the field are output first and vice versa.

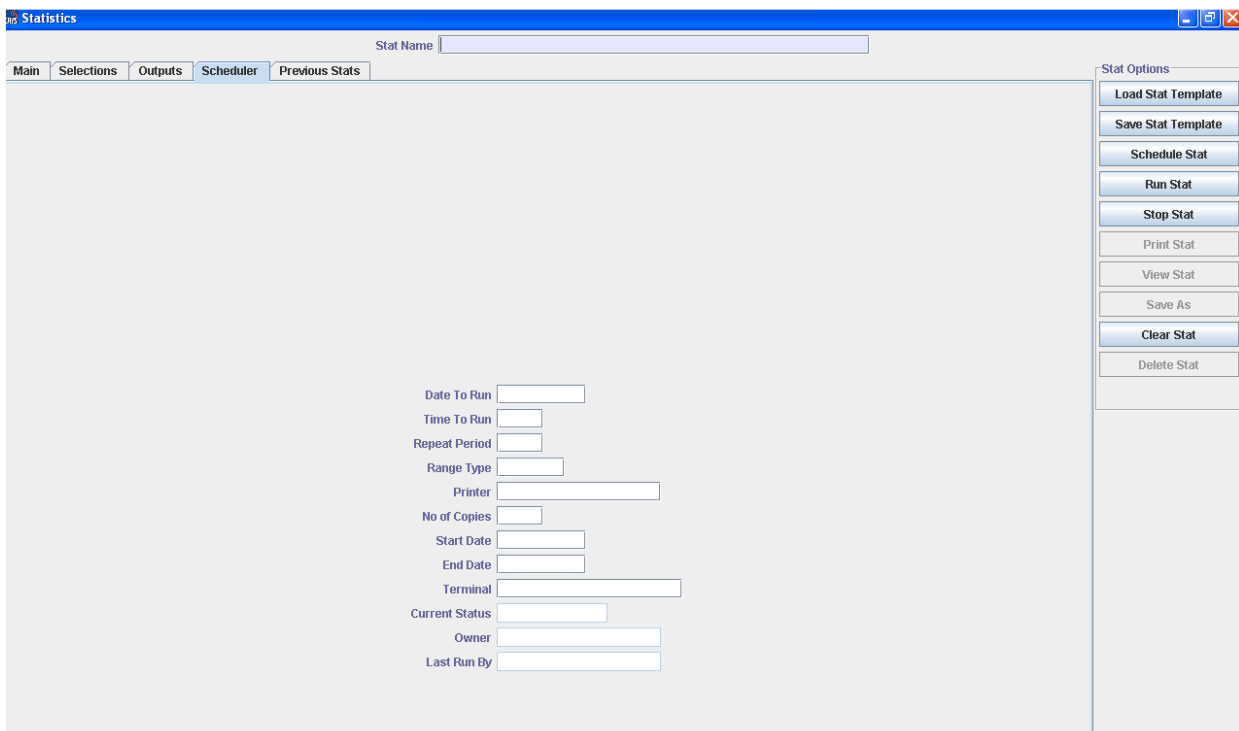
## ADDING OUTPUTS & SAVING AN OUTPUT TEMPLATE

**SAVING/OPENING A TEMPLATE** - Once you have defined an appropriate set of OUTPUTS and if required TOTAL LINES it is possible to save these as an **OUTPUT TEMPLATE** which can be re-used in other Statistical Reports which you may run in the future by clicking the [Save Template] and [Load Template] buttons appropriately.

**TO ADD AN OUTPUT** – It is possible to create as many OUTPUTS as required by clicking [Add Output] and to delete any OUTPUTS which are no longer required by clicking [Remove Output]. This will produce two (or more) screen outputs and separate CSV files.

## STATISTICAL REPORTS SCHEDULER

It is possible to schedule Stats to run at a specific date and time, and at regular intervals without any user intervention.




When scheduling a statistical report the following fields are available. Only Date to Run and Time are obligatory, the rest of the fields are optional.

STATS SCHEDULER USER INPUT REQUIREMENTS / OPTIONS	
Date to Run	<p>Use this field to specify the date the report is to be run – i.e. This is the date you actually want the report to run or be generated.</p> <p>For Example: If you want to run a Monthly Activity Report – you would enter the ‘Date to Run’ as 1<sup>st</sup> Day of the next Month and ensure that the Stats Selections ‘Stat Start Date’ and ‘Stat End Date’ is the 1<sup>st</sup> and Last Day of the this month. The Scheduler will then run automatically at the beginning of next month to enable you to collect your results after this date and before the end of next month when the scheduler will run its next monthly output.</p>
Time	<p>Use this field to specify the time (in 24hr format) that the report should be run – i.e. If the stat report is to be scheduled for 7am, set to 0700. HSS would recommend that in Datacentre models, and for locally deployed users running large report queries should be scheduled to run out of hours where possible.</p>
Printer (Optional / Automatic Field)	<p>Use this field to specify a particular printer which is available via the server, using [F4] prompt list to view available printers. Otherwise, if left ‘Blank’ this field will default to the standard ‘Scheduled Stats Printer’ as defined via your Terminal/Printer Set-up.</p> <p><u>Please note:</u> Customers with Locally Deployed Servers will need to contact the CRIS Helpdesk in order to request Printer set-up as the Scheduler uses TCP/IP server based printing <u>not</u> Windows Printing. Datacentre customers will need to contact their own CRIS Helpdesk as not all ‘Schedulers’ will necessarily have the ability to send a stat report straight to a printer and may be limited to file only outputs.</p>
Repeat Period (Optional Field)	<p>Use this option to specify the required repeat period, [F4] option list will be available. Alternatively leave this field blank to schedule the report to run as a one-off. Daily, Weekly, Monthly, Quarterly, Six Monthly, Yearly, Mon – Fri.</p>
Range Type (Automatic Field)	<p>This field is used to specify how the date range for the scheduled report should be incremented; [F4] option list will be available. This will normally be automatically completed upon selecting an appropriate Repeat period is Days, Months, Years.</p>
No Copies (Optional Field)	<p><b>For File based Outputs this should be left as 0.</b> Otherwise you should specify 1, 2, 3 etc. to generate hard copies via the Printer you have ‘specified’ or the default ‘Scheduled Stats Printer’ as defined via your Terminal/Printers Set-up.</p>
Start Date (Optional Field)	<p>The date at which the stat should start to be run by the scheduler. This can be used to prevent a Stat running before the specified date – i.e. Commencing from or as an audit trail for when the stats was originally set-up.</p>
End Date (Optional Field)	<p>The date at which the stat should cease to be run by the scheduler. Should only be set if the stat is not to be run after the specified date – i.e. Expiry Date.</p>
Terminal (Optional Field)	<p>Use this to specify the Terminal which will generate the results if they differ from the Terminal used to set-up the scheduled report – i.e. if you are setting up a Stat on behalf of another user at another site to generate hard copies. This setting is rarely applicable and should be left ‘Blank’ which will default to your own terminal as the same results can be achieved by using ‘Site’ specific selections or specifying a printer as above. However if this setting is utilised it enables the retrieval of terminal settings such as best hospital number, or uses the default ‘Stats Scheduler Printer’ for an alternative Terminal if you are not able to identify which Printer it would be but can identify the terminal. The [F4] help list is restricted to terminals at the current trust.</p>

## ADVANCED SCHEDULER OPTIONS

### STATISTICAL REPORT RESTRICTIONS

It is possible to restrict the total duration of a Stat being run In and Out of hours in order to prevent any significant impact on system performance. Consequently when running large date ranges or invalid/incorrect queries, the scheduler will stop the Stat automatically and send a message to the 'Show Messages' Console located on the Main Screen  to advise why the report could not be completed.

This facility can be activated or deactivated XRTR (Trustwide), XRS (Site Specific) or XRT (Terminal Specific) using the following settings:

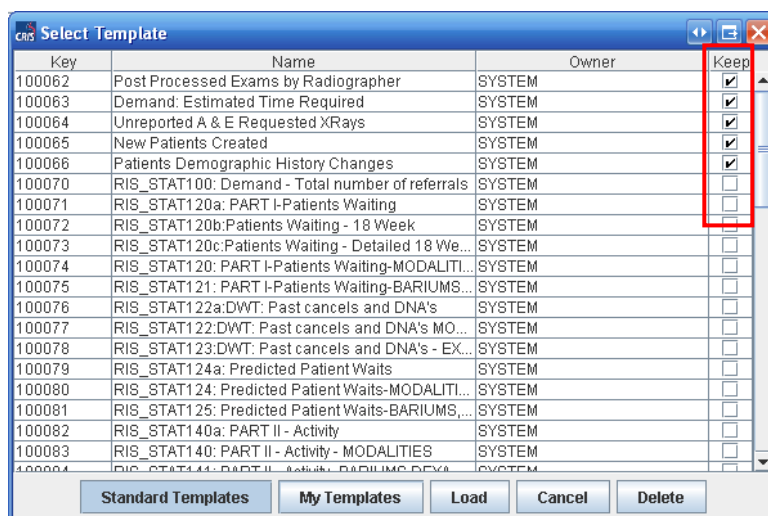
STATS.MaximumQueryTime = X (Amount of Seconds) during working hours

STATS.MaximumQueryTimeOutHours = X (Amount of Seconds) the latter of which uses RECEPTOnCallTimes.

### AUTO DELETION OF PREVIOUS STATS AND TEMPLATES

If the scheduler is running, it has the ability to auto delete stats for general housekeeping purposes and in order to keep the number of stats in the lists more up to date.

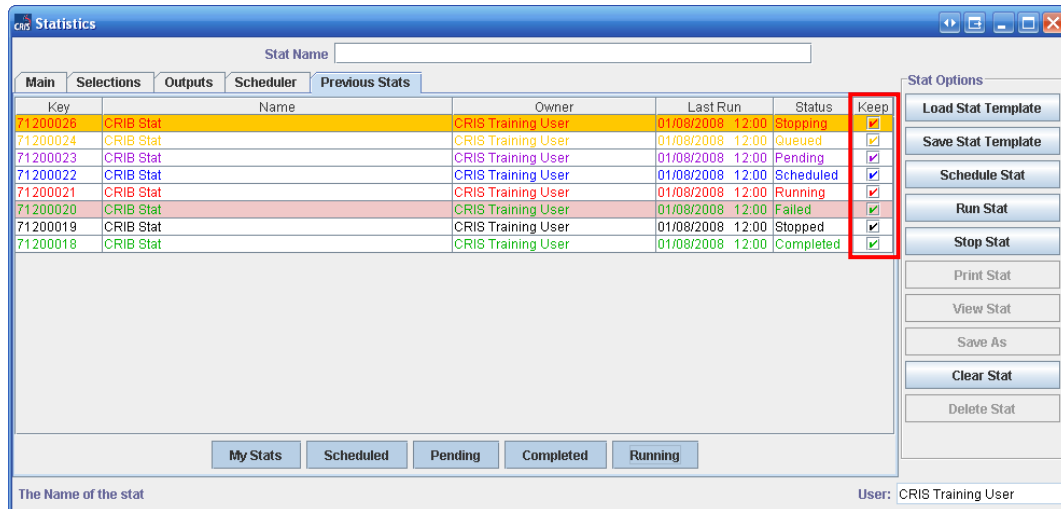
When a template is created or modified, the current date is stored against it. The scheduler then checks the list of stats once daily, and when the number of days since the date stored against the template exceeds the maximum number of days to keep stats (**30 Days by Default**), the template is deleted. There is an additional tick box on the load stat template page, which enables a stat to be kept for an indefinite amount of time. Once ticked, the scheduler will not delete any stats marked as to 'keep'.



Key	Name	Owner	Keep
100062	Post Processed Exams by Radiographer	SYSTEM	<input checked="" type="checkbox"/>
100063	Demand: Estimated Time Required	SYSTEM	<input checked="" type="checkbox"/>
100064	Unreported A & E Requested XRAys	SYSTEM	<input checked="" type="checkbox"/>
100065	New Patients Created	SYSTEM	<input checked="" type="checkbox"/>
100066	Patients Demographic History Changes	SYSTEM	<input checked="" type="checkbox"/>
100070	RIS_STAT100: Demand - Total number of referrals	SYSTEM	<input type="checkbox"/>
100071	RIS_STAT120a: PART I-Patients Waiting	SYSTEM	<input type="checkbox"/>
100072	RIS_STAT120b: Patients Waiting - 18 Week	SYSTEM	<input type="checkbox"/>
100073	RIS_STAT120c: Patients Waiting - Detailed 18 We...	SYSTEM	<input type="checkbox"/>
100074	RIS_STAT120: PART I-Patients Waiting-MODALITI...	SYSTEM	<input type="checkbox"/>
100075	RIS_STAT121: PART I-Patients Waiting-BARIUMS...	SYSTEM	<input type="checkbox"/>
100076	RIS_STAT122a:DWT: Past cancels and DNA's	SYSTEM	<input type="checkbox"/>
100077	RIS_STAT122:DWT: Past cancels and DNA's MO...	SYSTEM	<input type="checkbox"/>
100078	RIS_STAT123:DWT: Past cancels and DNA's - EX...	SYSTEM	<input type="checkbox"/>
100079	RIS_STAT124a: Predicted Patient Waits	SYSTEM	<input type="checkbox"/>
100080	RIS_STAT124: Predicted Patient Waits-MODALITI...	SYSTEM	<input type="checkbox"/>
100081	RIS_STAT125: Predicted Patient Waits-BARIUMS...	SYSTEM	<input type="checkbox"/>
100082	RIS_STAT140a: PART II - Activity	SYSTEM	<input type="checkbox"/>
100083	RIS_STAT140: PART II - Activity - MODALITIES	SYSTEM	<input type="checkbox"/>
100084	RIS_STAT141: PART II - Activity - BARIUMS DEVA...	SYSTEM	<input type="checkbox"/>

Standard Templates My Templates Load Cancel Delete

The same functionality is applicable to the [Previous Stats] screen. If the number of days since the date last run is greater than the number of days to keep stats, it will be deleted. The only exception to this is any stats with the 'keep' flag is selected, or in the event that a stat is a scheduled / pending to run. If the stat is a scheduled / pending stat it will only be deleted if the days since the schedule repeat end date for the stat exceeds the number of days to keep stats.

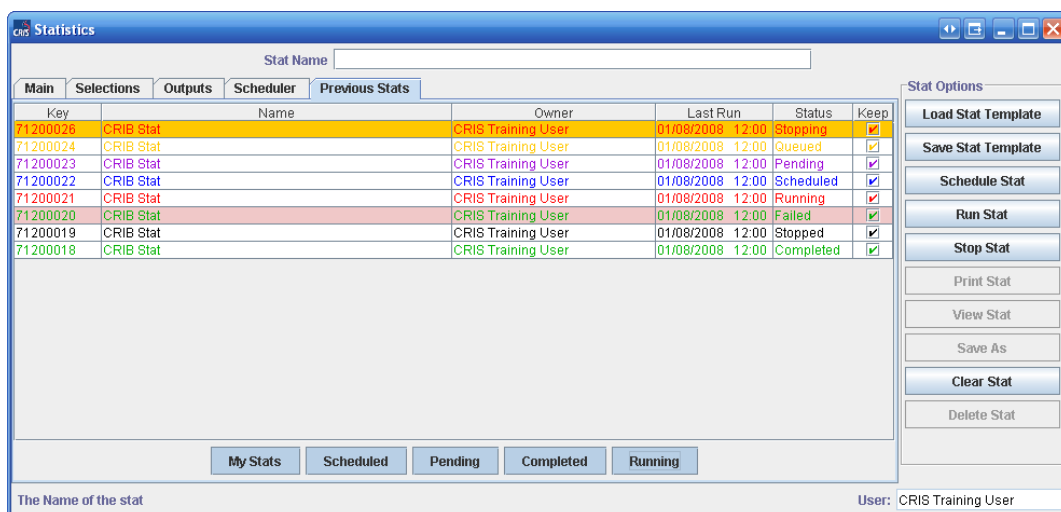


Unless the user has the security setting of STATS > UPDATEALL they will only be able to change the 'keep' flag of stats they own themselves. Stats owned by SYSTEM cannot have their 'keep' flag changed by anybody, as they should never be deleted.

## PREVIOUS STATS

This screen displays a list of all previous Statistical Reports. The list can be filtered using the [Running], [Scheduled], [Pending], [Completed] and [My Stats] buttons at the bottom of the screen.

The [My Stats] button enables you to toggle between displaying stats for everyone, or just the current user. The stats displayed on the previous stats screen vary in colour according to their current status.





The following provides an overview of each status and an example of their use within the stats module:

STATUS	MEANING	TEXT COLOUR	BACKGROUND COLOUR
Scheduled	A report that is due to run at a specified date and time, and is to be repeated.	Blue	White
Pending	A report that is due to run at a specified date and time, but is not to be repeated.	Purple	White
Queued	A stat that is ready to run, but is waiting for available resources.	Orange	White
Running	A stat that is currently running.	Red	White
Stopping	A stat that is running but has been requested to stop by a user.	Red	Orange
Stopped	A stat that has stopped, due to a user requesting that it stopped and therefore is not complete.	Black	White
Failed	A stat that has failed to complete due to an error.	Green	Red
Complete	A stat that has run and completed successfully.	Green	White

### NEW - SEARCHING / FILTERING PREVIOUS STATS

It is now also possible to search / filter the Previous Stats screen using the following text filtering options – Stat Key, Stat Name, Stat Owner and Trust. Your Trust code is now set automatically to restrict stats results to your own Trust when within a Consortium deployment.

Main	Selections	Outputs	Scheduler	Previous Stats						
Stat key: <input type="text"/> Stat name: <input type="text"/> Stat owner: <input type="text"/> Trust: <input type="text" value="HSS"/>										
Key	Name			Owner	Last Run		Status	Keep		
10000041	RIS_STAT204: ISB 1577 Diagnostic Imaging Data Set			EMMA SAVAGE-MADY	23/01/2014	15:28	Failed	<input type="checkbox"/>		
10000037	HSS01 - TOTAL ACTIVITY			Healthcare Hospital Training User	09/01/2014	10:26	Completed	<input type="checkbox"/>		
10000038	RIS_STAT204: ISB 1577 Diagnostic Imaging Data Set			Healthcare Hospital Training User	05/12/2013	19:09	Completed	<input type="checkbox"/>		
10000036	HSS01 - TOTAL ACTIVITY			Healthcare Hospital Training User	05/12/2013	18:45	Stopped	<input type="checkbox"/>		
10000034	HSS01 - TOTAL ACTIVITY			Healthcare Hospital Training User	05/12/2013	18:45	Failed	<input type="checkbox"/>		

### TO STOP A STATISTICAL REPORT

If you have started running a stat and wish to stop it for whatever reason, click the 'Running' filter button, highlight the Stat and click the [Stop Stat] function button.

If the CRIS system is shut down before a stat that is currently running has finished, a warning message is displayed asking if the user is sure they wish to shut down, as this will stop the stat running. If the user clicks 'No', they will return to their Stat however if they click 'Yes' the stat will be stopped.

Shutting down the CRIS System will automatically stop any Stats running on that terminal, however the CRIS Logout no longer stops stats thereby enabling them to continue running in the background. This allows users to be able to manually logout of their terminals without interrupting running stats, make more effective use of the auto time out features within CRIS.



## TO OPEN / SAVE A PREVIOUSLY COMPLETED STATISTICAL REPORT

You can load a previously completed Statistical Report by clicking the 'Completed' filter button.

Selecting / highlighting it on the list with a SINGLE CLICK will enable you to view the Stat Selections in order make amendments before re-running the report, or to allow you to save a copy of the stat using [Save Stat Template]. DOUBLE-CLICKING the report will load the Stat Selections, and the results to allow you to select [View Stat] or [Save As] to export the file.

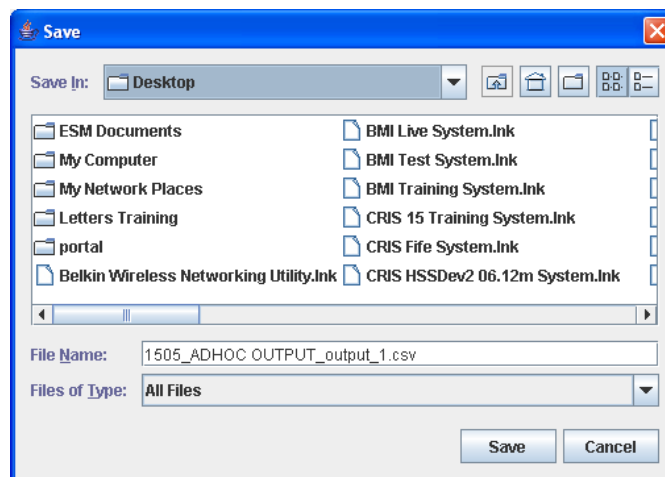
## ACCESSING 'SCHEDULED' STATISTICAL REPORT RESULTS

After the 'Date to run' has passed and before the next repeat period you need to go to the 'Previous Stats' screen and filter by [Scheduled Stats] button.

Your scheduled Stat will show the 'Date last run'. To access the results double-click the relevant Stat and then click [View Stat]. This will enable you to view the results. Alternatively the [Save As] option will enable the file to be saved with a user specified directory and filename.

## TO EXPORT AN EXISTING REPORT TO YOUR PC OR ANY OTHER NETWORK LOCATION

It is now possible to export existing Stats reports directly to your own PC, or any other network location simply by clicking the [Save As] function button, and choosing an appropriate filename and file destination.





## GENERAL 'STATS' FUNCTIONALITY AND RUNNING/PRINTING A STATS REPORT

Having defined all appropriate elements of your Statistical Report you can make use of general Statistical Report Function functionality in order to SAVE A STAT TEMPLATE or RUN, SAVE or PRINT the Statistical Report using any of the following buttons located on the far-right hand side of the screen.

[Load Stat Template]	<p>Use this option to Load a Stats Template.</p> <p>Any Report marked as SYSTEM is a Read Only Template which cannot be modified. It is however possible to click [Load Template], followed by [Save Stat Template] to save a copy of this report for yourself.</p> <p>You can also filter the Templates list by clicking the [Standard Templates] or [My Templates] buttons to filter the list accordingly.</p> <p>Stat templates are now displayed in reverse chronological order – i.e. the last created to first created stat template by default, with any templates owned by SYSTEM displayed at the bottom of the list.</p> <p>Having done this use [Load Stat Template] to open your own copy of this report and make any necessary amendments.</p>
[Save Stat Template]	Use this option to SAVE a Stats Template for future use rather than having to amend Previous Stats.
[Schedule Stat]	Schedule the stat to run in the future, at the specified date and time, with the specified repeat period, and sent to the specified printer where applicable.
[Run Stat]	Runs the report – If stats are configured to run on the client, a Status bar will appear at the bottom of the screen to illustrate the progress of the reports and will display as 'Stat Complete' when finished. If the stats are configured to run by the scheduler, they will be saved, ready to be run by the scheduler as soon as possible.
[Stop Stat]	<p>Use this option to stop a stat report in the event that you have made an error on the report or it is taking longer to complete than expected.</p> <p><u>Please note:</u> You cannot click this button from the Selections or Outputs Screen as this feature is designed to allow Stats to be stopped remotely by System Administrators as well as standard users. To Stop a Stat you should click the 'Previous Stats' Tab select the 'Running' filter button, and highlight the relevant Stat before clicking [Stop Stat].</p>
[Print Stat]	Use this option to print a copy of a Stat to the Printer specified via TOOLS > Printer Set-up > Statistical Reports.
[View Stat]	Use this option to View the final Statistical Report output.
[Save As]	Use this option to export existing Stats reports directly to your own PC, or any other network location simply by clicking the [Save As] function button, and choosing an appropriate filename and file destination.
[Clear Stat]	Use this option to clear a Statistical Report from the screen in order to create or to load another report.

[Delete Stat]	<p>Use this option to Delete any Statistical Reports which are no longer required.</p> <p>It is possible to delete a number of stats in one go, by highlighting a range from the 'Previous Stats' list, before clicking the [Delete Stat] function button.</p> <p><u>Please note:</u> It is also possible to Delete Stat Template by clicking [Load Template] highlighting the appropriate reports and selecting the [Delete] button at the bottom of the screen.</p>
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## CREATING REPORTS: HINT AND TIPS

When creating and running Stats you consider the following recommendations in order to ensure the good practice and the most time effective method of generating results.

**UNNECESSARY FIELDS** - Do not include any Selection Fields, Output Fields, Total Lines or Grouping that you do not require for the current Stat. Consequently, when using System Templates or your own saved templates reduce the report to only the required information as including redundant fields/tables can significantly slow down a report run.

**REMOVE TOTAL LINES** – If you do not require any total lines of your report as you simply wish to display/extract data you should remove the Total Lines before running the report in order to optimize performance.

**RECOMMENDED DATE RANGES** - Always try to use a 'Start and End' date range selection where possible, preferably using either the EVENTS.DATE or EXAMS.DATE field as this will ensure you take the most direct route through the database.

**ILL ADVISED DATE SELECTIONS** - Do not include redundant Selection Criteria's

For example:

```
EVENTS.MONTH      =      JAN
OR
EVENTS.MONTH      =      FEB
OR
EVENTS.MONTH      =      MAR
```

Or Alternatively

```
EVENTS.DATE  such as  EVENTS.DATE  >=  01/01/2007  and  EVENTS.DATE  <=  01/04/2007
```

Selections like these are extremely time and resource intensive to produce and it is therefore always better to specify a date range using the EVENTS.DATE ranges rather than EVENTS.MONTH.

**CONCENTRATE ON KEY SYSTEM TABLES** – where possible select the information (fields) you require in the key CRIS System tables (i.e. PATIENT, EVENTS, EXAMS, REPORTS, STATUS, VOLUMES) before looking in the other tables. This is because by doing this you will not normally need to ‘Join’ tables together and therefore you will be less likely to forget to create a join which may be essential to the correct running of the Stat.

**ENSURE TABLES HAVE BEEN JOINED TOGETHER** - When using any fields/tables outside of the Main CRIS System Tables / Hierarchy (i.e. PEERS - PATIENT, EVENT, EXAMS and REPORTS, STATUS tables) it will almost always be necessary to use a ‘JOIN’ to create a relationship between one of the aforementioned tables and the tables you wish to query. Please therefore always refer to the ‘CRIS DATABASE SCHEMA’ contained at the end of this document in order to establish the correct tables to join together as appropriate.

**Please note:** If you do not join tables together this will more often than not mean that the Statistic will take a significant amount of time to complete as it has no direct route through the database and this may also therefore affect the speed of the system for all users in the Trust or Consortium (in a datacentre model).

**CHECKING/REMOVING JOINS** - Please ensure that when using existing System Templates or your own saved templates you review and remove any unnecessary joins. Alternatively if modifying the report to include additional fields/tables please ensure that you add any joins as applicable.

**USE AUTO JOINS** – Please ensure that the ‘Use Auto Joins’ check box is ticked prior to running any report as this option joins the main tables in the most efficient way. It is possible to temporarily untick the box to check which joins have already been specified but do not forget to re-tick the box after checking.

**USE SITE RATHER THAN TRUST** - Where convenient EVENTS.SITE with an [OR] Clause and (Brackets) can be more effective than SITES.TRUST as use of this table will require a Join whereas EVENTS.SITE does not.

**EXCLUDING DUMMY/TEST PATIENTS** - To exclude records from the statistical returns, it is not sufficient to exclude any record that is “Test” or starts “ZZZ” for example. The ONLY way that a true exclusion can happen is to exclude each dummy/test patient using the actual CRIS Number of each dummy/test patient.

**PATIENT.CRIS Number**

<>	2
AND	
<>	144
AND	
<>	215

You should also ensure that creation of Dummy/Test patient is very much limited on the ‘Live’ CRIS system and or ensure that either Events or the entire patient records are regularly deleted in order to prevent the inclusion of these patients in your Statistical Results.

## STATS VERSION INFORMATION

Stat template configurations and the fields which are available in stats are controlled by configuration items that can be updated separately to the main CRIS application.

To identify which stats version is currently in use, the version number, version date, and date the stats were updated on the database are displayed, click on the 'Help' then 'About' menu via the 'Main' screen in the CRIS application. The details are then available via the 'Stats' tab.

About	Libraries	Stats	Acknowledgements
Property		Value	
Release Number		6.0.3	
Release Date		09/01/2014	
Date Updated		29/07/2013	

## Statistical Reports Access Settings

### SECURITY SETTINGS

The following security settings are required to access and use the Statistical Reports Module:

Section	Item	Description
VIEWS	STATS	Enables access to the Statistical Reports Module.
STATS	OVERRIDE_LONG	Allows the user to override the automatic stopping of long statistical report queries in conjunction with STATS.MaximumQueryTime, and STATS.MaximumQueryTimeOutHours XR Settings. If the User has this setting = Y, a warning message is displayed to inform the user that the stat is a long query but they have the option to proceed – whereas = N would prevent them overriding the setting.
STATS	STOP_STATS	Permission to stop stats.
STATS	UPDATEALL	Controls if users are allowed to update other people's stats.

## Statistical Reports Module Configuration Settings

### XR SETTINGS

The following XR setting are designed for use with the Statistical Reports Module. Where applicable these settings can be applied at XRTR (Trust), XRS (Site) or XRT (Terminal) Level as applicable via **TABLES > SYSTEM TABLES > XR SETTINGS**. The **BLUE HIGHLIGHT** shows which settings are essential to the correct functioning of the module and the correct set-up of the Statistical Reports Scheduler.

Filter: stats	<input checked="" type="checkbox"/> Setting <input type="checkbox"/> Description	Show All	XRT.HSS_ESM
Setting	Description	Value	
PRINTER.ScheduledStats	The default printer used to print scheduled stats		
PRINTER.ScheduledStatsDS	Print scheduled stats double sided	N	
PRINTER.Stats	The printer used to print stats	No Printer	
PRINTER.StatsDS	Print stats double sided	N	
SPINE.LrLogStatsView	LR Request logging to view statistical reporting data is acti...	No	
STATS.AlterDatabaseSession	String of database session options set when stats creates...		
STATS.DefaultDirectory	Stats default directory	Ju1/cris/stats	
STATS.FTP.Password	Stats FTP password	*****	
STATS.FTP.Server	Stats FTP server	trainingvm	
STATS.FTP.ServerFromScheduler	Stats FTP server IP from scheduler server		
STATS.FTP.UseFTP	Use FTP instead of SFTP for stats file transfers	No	
STATS.FTP.User	Stats FTP user ID	cris	
STATS.FieldQuantityLimit	The number of fields allowed before limiting the number of...		
STATS.FtpStatsToAndFromServer	Should stats be transferred to and from the server		
STATS.IncludeSoftFormDictionary	Include fields from soft form dictionary		
STATS.LocalDirectory	Local directory in which to store stat reports	c:\cris3\stats	
STATS.MaximumQueryTime	Query time (secs) available to stats in normal hours witho...		
STATS.MaximumQueryTimeOutHours	Query time (secs) available to stats out of normal hours wi...		
STATS.ReportingDatabaseLinkDetails	Reporting database connection eg. dbname=cris port=19...		
STATS.ResultsetSize	The number of results processed at a time in stats		
STATS.RunNowLocal	Does the run stat button in statistics bypass scheduler?	Yes	
STATS.SchedulerAvailable	Is the Stats Scheduler available?	Yes	
STATS.SuggestJoins	When should stats table joins be suggested	A	
STATS.UserSaveSecurity	Should the saving of stats be secure from normal users s...	Yes	
STATS.WaitingTimeClockStartDate	Date used when starting the waiting time clock (RR / RM)	RM	



Setting	Description
PRINTER.ScheduledStats	<p>The default printer used to print scheduled Stats. Use this field to specify a particular printer which is available via the server, using [F4] prompt list to view available printers. This is not typically used as the standard printing is undertaken via Printers Set-up &gt; Stats.</p> <p><u>Please note:</u> Customers with Locally Deployed Servers will need to contact the CRIS Helpdesk in order to request Printer set-up as the Scheduler uses TCP/IP server based printing not Windows Printing. Datacentre customers will need to contact their own CRIS Helpdesk as not all 'Schedulers' will necessarily have the ability to send a stat report straight to a printer and may be limited to file only outputs.</p>
PRINTER.ScheduledStatsDS	Use this to specify if Scheduled Stats should be printed double sided – press [F4] to choose Y or N.
Printer.Stats	The printer used to print Stats – this is the standard printer for printing stats as defined via TOOLS > PRINTER SET-UP
PRINTER.StatsDS	Use this to specify if Scheduled Stats should be printed double sided – press [F4] to choose Y or N.
SPINE.LRLogStatsView	This setting should be set to N as default. This setting is designed to log all records accessed via Stats for SPINE LR audits. This setting should not be enabled without prior discussion with the HSS Helpdesk
STATS.AlterDatabaseSession	This setting is for use by the HSS Helpdesk / Technical Services Department - do not amend unless directed to do so by HSS.
STATS.DefaultDirectory	These settings should already be configured appropriately from go-live. It may however be necessary to check/set this for the Training and Testing (If applicable) Systems to ensure that it is not set to simply point at the live stats directory.
STATS.FTP.Server	
STATS.FTP.Server STATS.FTP.ServerFromScheduler	<p>These settings should already be configured appropriately from go-live.</p> <p>The CRIS Statistical reports module can now also utilise SFTP rather than FTP for security purposes but you will need to have a server with SFTP Software installed on it. To make use of CRIS Statistical reports including the new 'CRIS Statistical Reports Scheduler' Trust IT will need to ensure that Port 22 is open and available on the FTP server and Trust Firewall, to facilitate SFTP file transfer from the CRIS server (where the scheduler runs the Stats) and onto the FTP server (for storing stats and viewing purposes).</p> <p>For Datacentre models or any sites using a local FTP Server this will need to be set-up by Trust IT via the local FTP Server, and configured at XRTR level by the RIS System Manager. Alternatively customers with locally deployed CRIS servers should contact the HSS Helpdesk in the first instance.</p> <p><b>STATS.FTP.Server</b> - Enter IP Address or DNS Name for FTP Server  <b>STATS.FTP.ServerFromScheduler</b> - Enter IP Address or DNS Name for FTP</p>



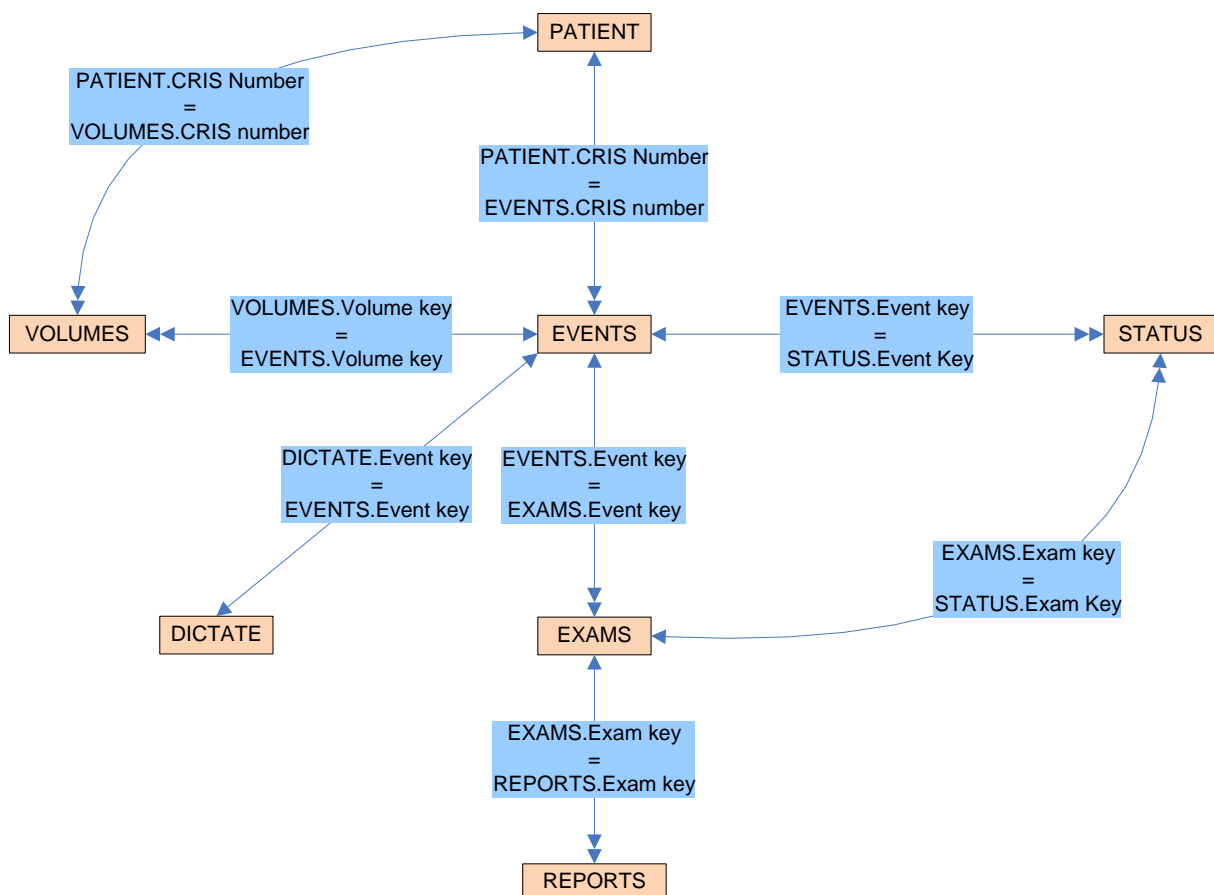
	Server from the CRIS Server (or "Localhost") if the CRIS Server is also the FTP Server). This is the N3 IP address for the server that the CRIS Server will use to connect to the SFTP server.
STATS.FTP.UseFTP	Use FTP instead of SFTP for Stats Transfer files. Should be set to Yes if standard FTP is required or No if SFTP is in use. Do not amend unless directed to do so by HSS.
STATS.FTP.User STATS.FTP.Password	<p>It will also be necessary to create an appropriate FTP / SFTP Username and Password for use in conjunction with CRIS statistical reports. This user needs to have full read and write access to the appropriate Stats directories via the FTP / SFTP Server.</p> <p>For Datacentre models or any sites using a local FTP / SFTP Server this will need to be set-up by Trust IT via the local FTP / SFTP Server, and configured at XRTR level by the RIS System Manager. Alternatively customers with locally deployed CRIS servers should contact the Helpdesk in the first instance.</p> <p>STATS.FTP.User                      Enter STATS FTP USER Details here STATS.FTP.Password              Enter STATS FTP Password here</p>
STATS.FieldQuantityLimit	For HSS use only - This setting should <u>NOT</u> be modified.
STATS.FTPStatsToAndFromServer	Should Stats be transferred to and from the server. Values = Y(es), N(o) or C(lear). When set to "Clear" the local directory containing any stats files created is cleared more regularly than previously. Before the directory was only cleared at login time, now with this setting as soon as a stat has been run and the file has been successfully FTP'd to the storage server, the local files are deleted, meaning the only copy is the one securely stored on the server. Should the user then wish to view the files, upon pressing "View Stat", the files are FTP'd back from the storage server to the local client PC and displayed on screen. As soon as the screen is displaying the files, they are deleted from the local drive. The same is also true for the printing of the reports. This means that local copies of the stats output files are stored for very short periods of time, a few seconds maximum. This will cause more network traffic, as the file will have to be FTP'd each time an operation is performed, but will mean that the files are on the local drive for less time and are therefore more secure.
STATS.IncludeSoftFormDictionary	Only for use in conjunction with CRIS Soft Forms and for configuration by HSS.
STATS.LocalDirectory	Set as C:\cris3 or an alternative location to specify where stats should be saved. Please note: This location is only a temporary storage and will be cleared down upon reloading the CRIS application.
STATS.MaximumQueryTime	These are a number of seconds before the query is stopped automatically by the scheduler, due to the oracle management suggesting that the query

	will take a large amount of time. Values = Any whole number, or if left blank defaults to 1 hour.
STATS.MaximumQueryTimeOutHours	Additional setting to allow the number of seconds before stopping the stat to be different depending on whether the query is being run during normal working hours (Peak time) or not (Normal working hours being defined in the RECEIPT.OnCallTimes setting). When these settings force the automatic stopping of a stat, a message is sent to the user to inform them. Values = Defaults to 3 hours.
STATS.ReportDatabaseLinkDetails e.g. dbname = cris, port = 1949, host = Postgres	It is now possible on a postgres database to specify the DR node as the database to run statistical reports against. To do so, the XR Setting of STATS.ReportingDatabaseLinkDetails needs to be set. The setting will require details of the form: "dbname=... port=... host=..." The user log on credentials are then taken from those currently cached on the client terminal. This XR Setting will not be available on Oracle databases as the feature is not possible. This will affect all stats that are run, whether through the scheduler or on the local clients.
STATS.ResultsetSize	For HSS use only - This setting should <u>NOT</u> be modified.
STATS.RunNowLocal	Enables the Stat to run locally (i.e. immediately on the Terminal/PC) rather than forcing the stat to be run through the scheduler.  This is mainly for support and training purposes but can be turned on for normal usage with the RIS System Managers approval.  Values = Yes, No, or blank. When the setting is blank (not set) the default will be to run all stats through the scheduler, if it is available.
STATS.SchedulerAvailable	Used to enable or disable the Stats Scheduler.  Values = Yes, No, or blank. When the setting is blank (not set) default will be to disable the scheduler.
STATS.SuggestJoins	When should a stats table joins be suggested? This setting allows CRIS to prompt users when a join is required if this has not been entered by the user creating a Stat. Options are A – Always, N – Never, or R – Run (upon running the stat).
STATS.UserSaveSecurity	Legacy system setting no longer applicable.
STATS.WaitingTimeClockStartDate	Date used when starting the Waiting Time Clock – Values = RM (English standard) RR (Scottish standard).
GENERAL.InactivityLogout	You should ensure that the inactivity Shutdown (the time before CRIS logs out) is sufficient for the purposes of running any required Stats that you do not plan to schedule. This is due to the fact that CRIS will terminate any unscheduled Stats upon closing.
GENERAL.InactivityShutdown	You should ensure that the inactivity Shutdown (the time before CRIS shuts down entirely) is sufficient for the purposes of running any required Stats that you do not plan to schedule. This is due to the fact that CRIS will terminate any unscheduled Stats upon closing.

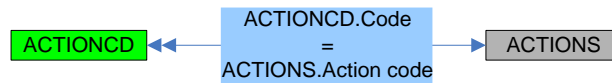
## CRIS Database Schema Diagrams

The following Database Schemas are designed to show the links / relationships between all CRIS database tables. This is both for reference and as an aid to determining which tables will need to be joined when using a fields which is not from one of the Main CRIS System Tables / Hierarchy (most easily remembered as **PEERS** – PATIENT, EVENT, EXAMS, REPORTS, STATUS) Tables and are not therefore automatically joined together. Main Tables are displayed below, and use the following **ORANGE HIGHLIGHT** to indicate their status as a main table – i.e. a Table which does not require a manual join. If a manual join is necessary the **BLUE HIGHLIGHT** shows which TABLE.FIELDS should be joined / linked together.

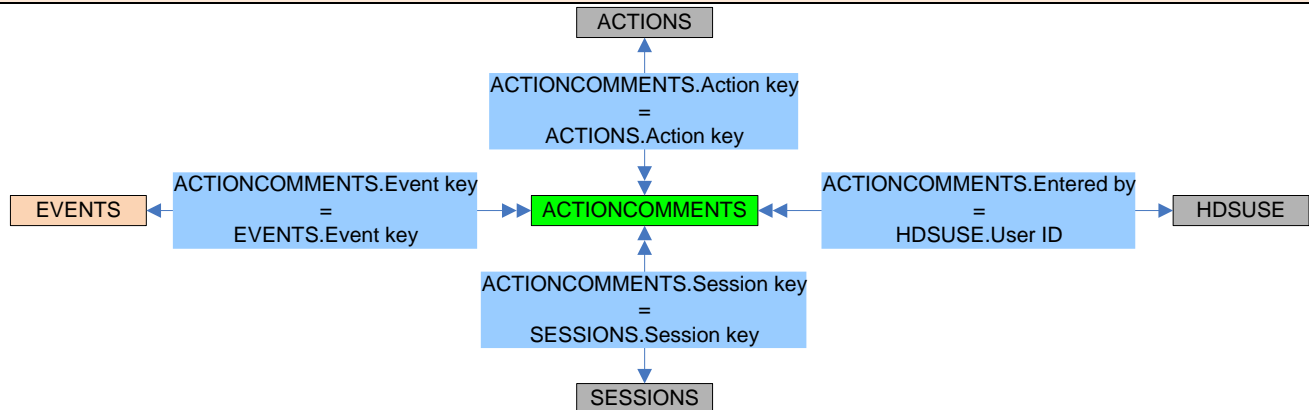
### MAIN CRIS SYSTEM TABLE OVERVIEW



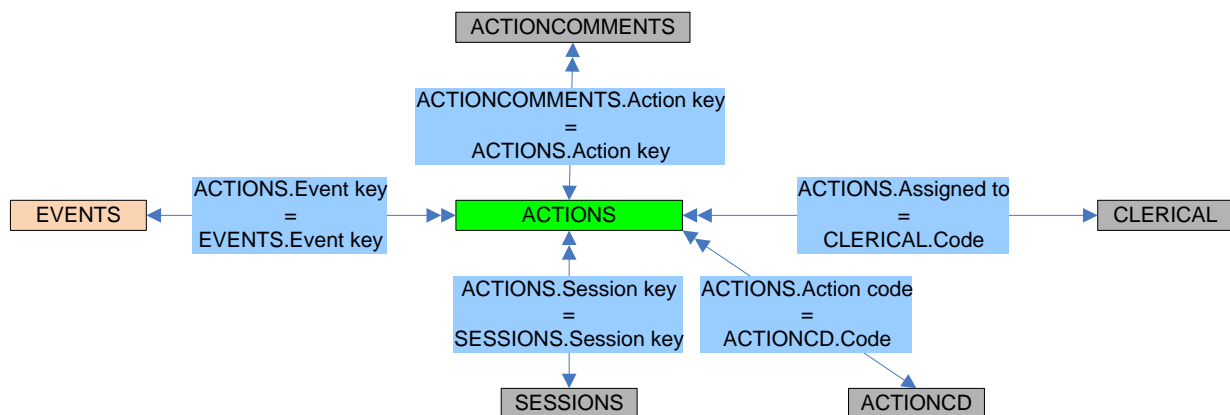
## ACTIONCD LINKS



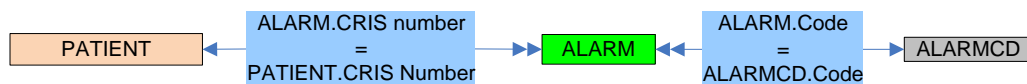
## ACTIONCOMMENTS LINKS



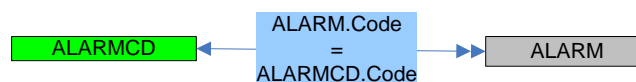
## ACTIONS LINKS



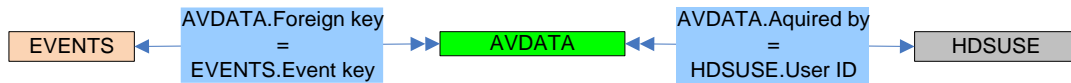
## ALARM LINKS



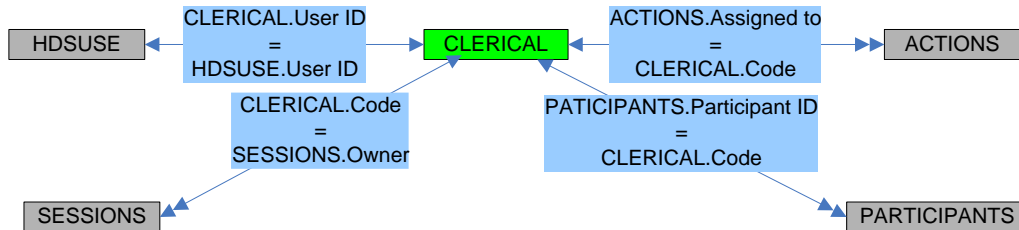
## ALARMCD LINKS



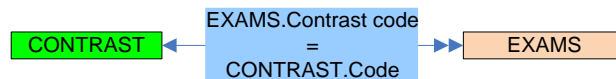
### AVDATA LINKS



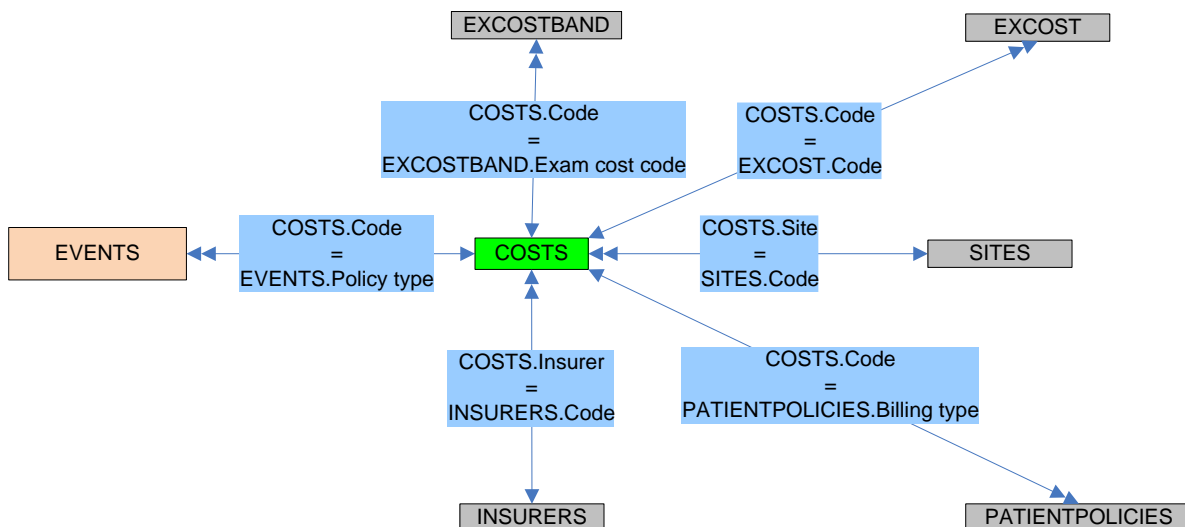
### CLERICAL LINKS



### CONTRST LINKS



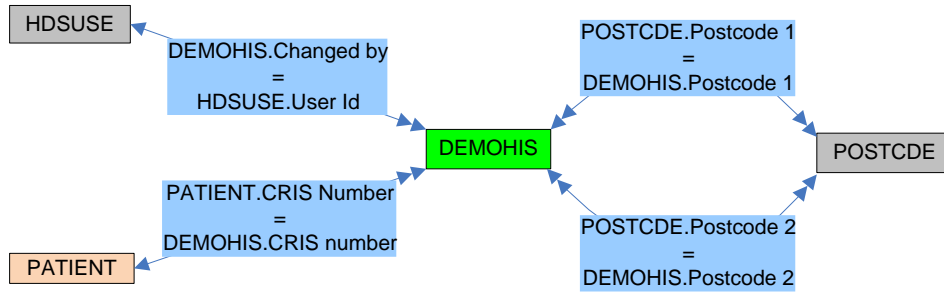
### COSTS LINKS



### CRISSTT TYPES



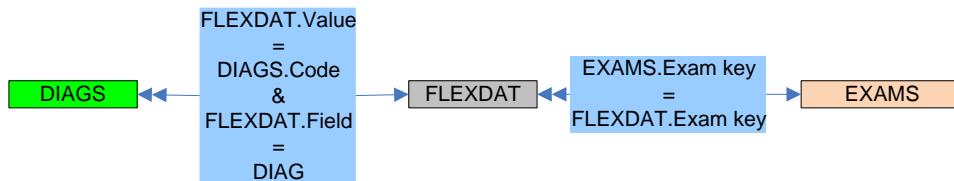
## DEMOHIS LINKS



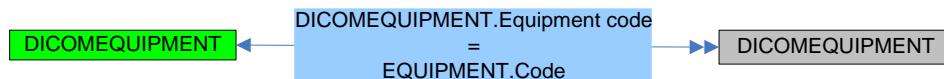
## DEPT LINKS



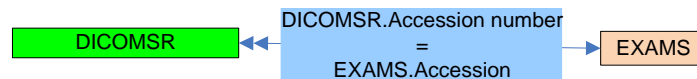
## DIAGS LINKS



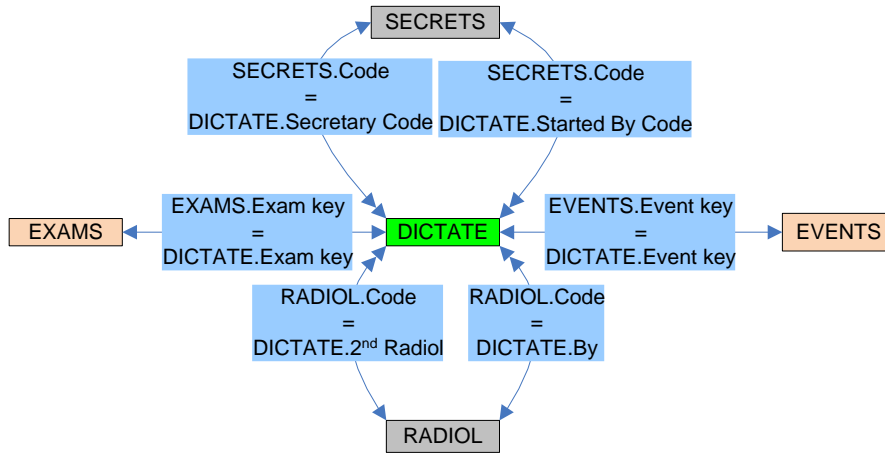
## DICOMEQUIPMENT LINKS



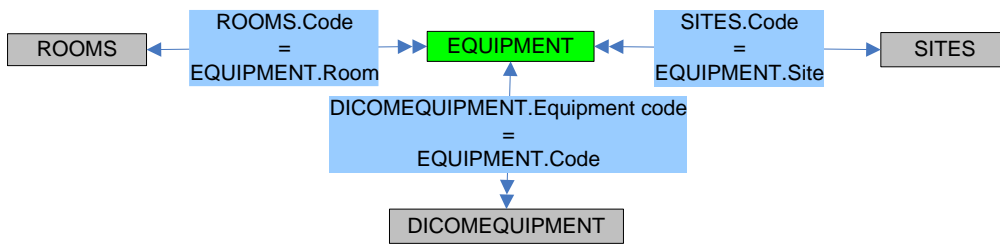
## DICOMSR LINKS



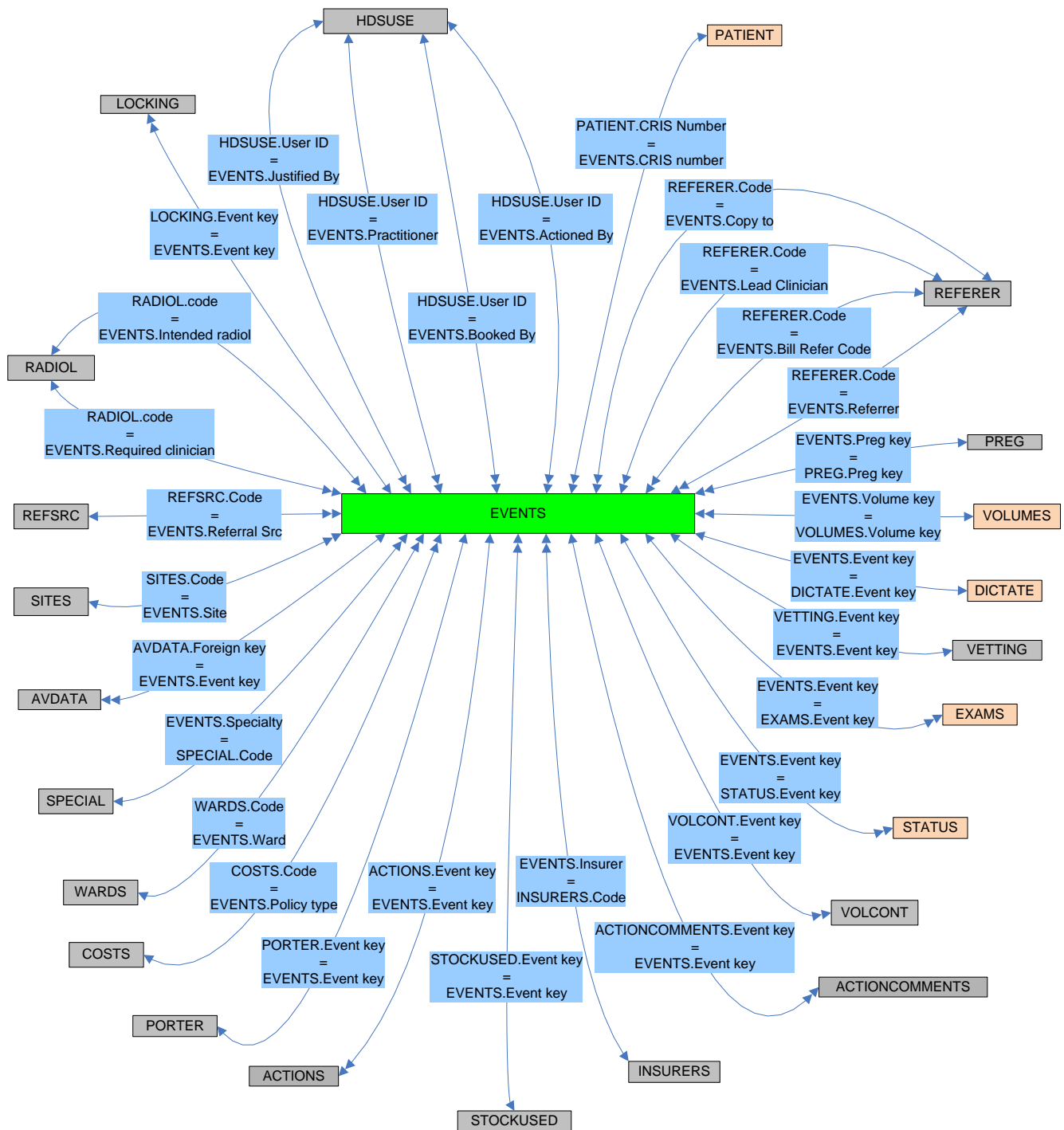
## **DICTATE LINKS**



## **EQUIPMENT LINKS**

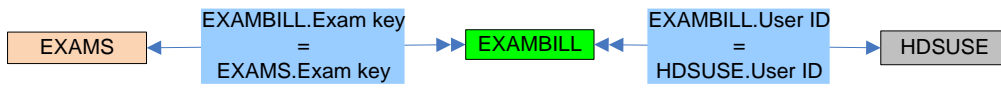


## EVENTS LINKS

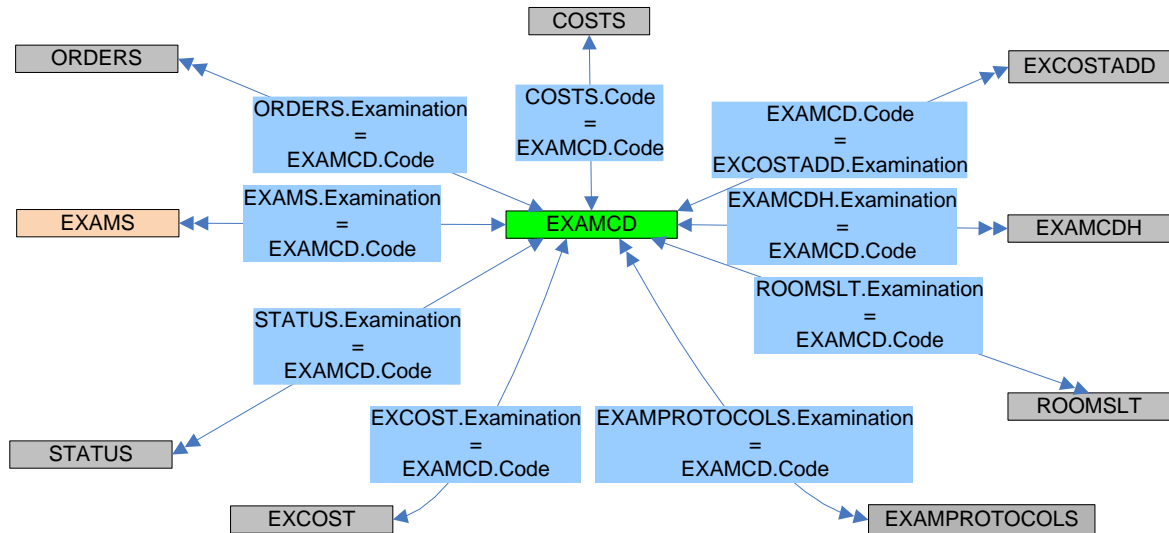




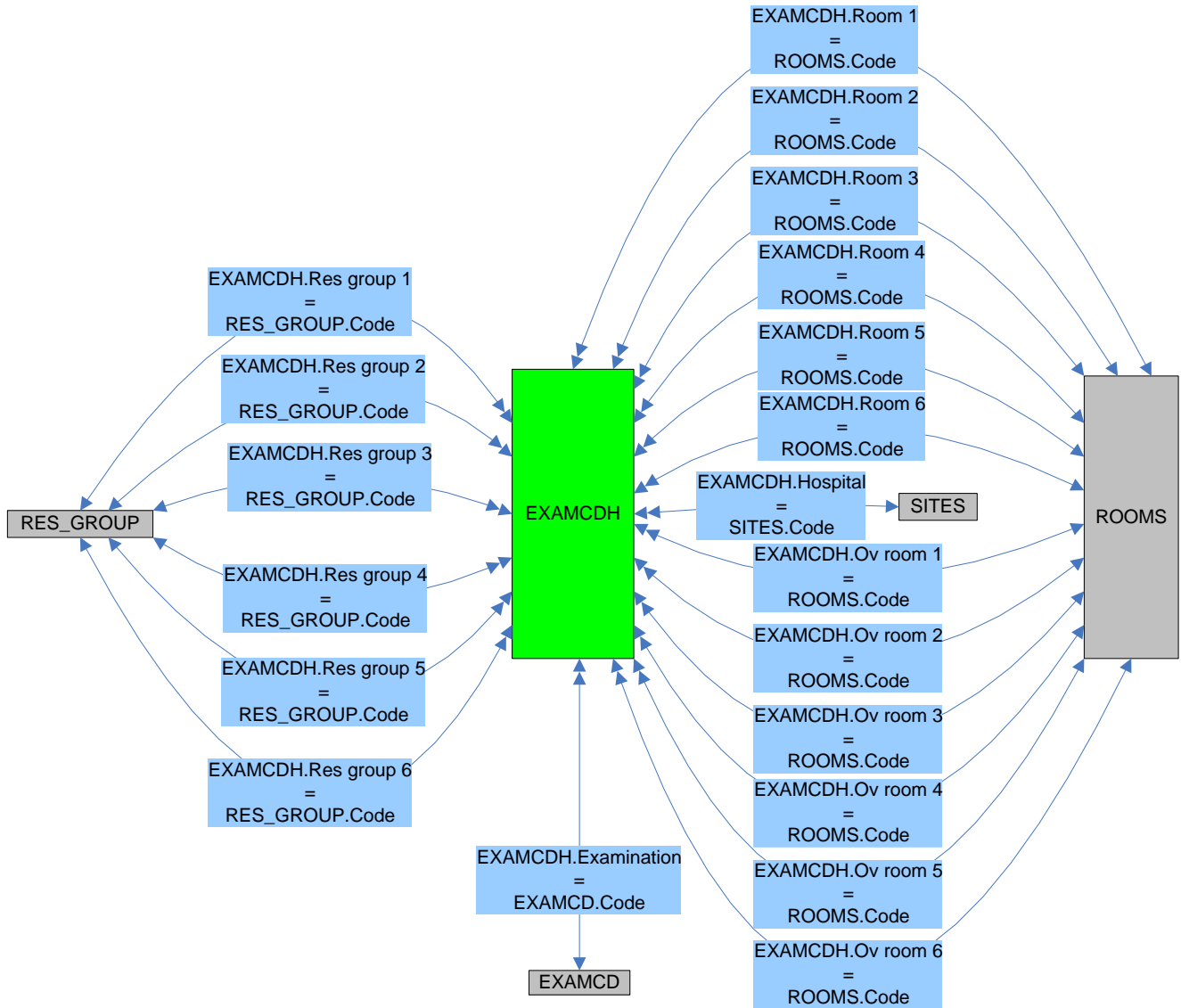
## EXAMBILL LINKS



## EXAMCD LINKS



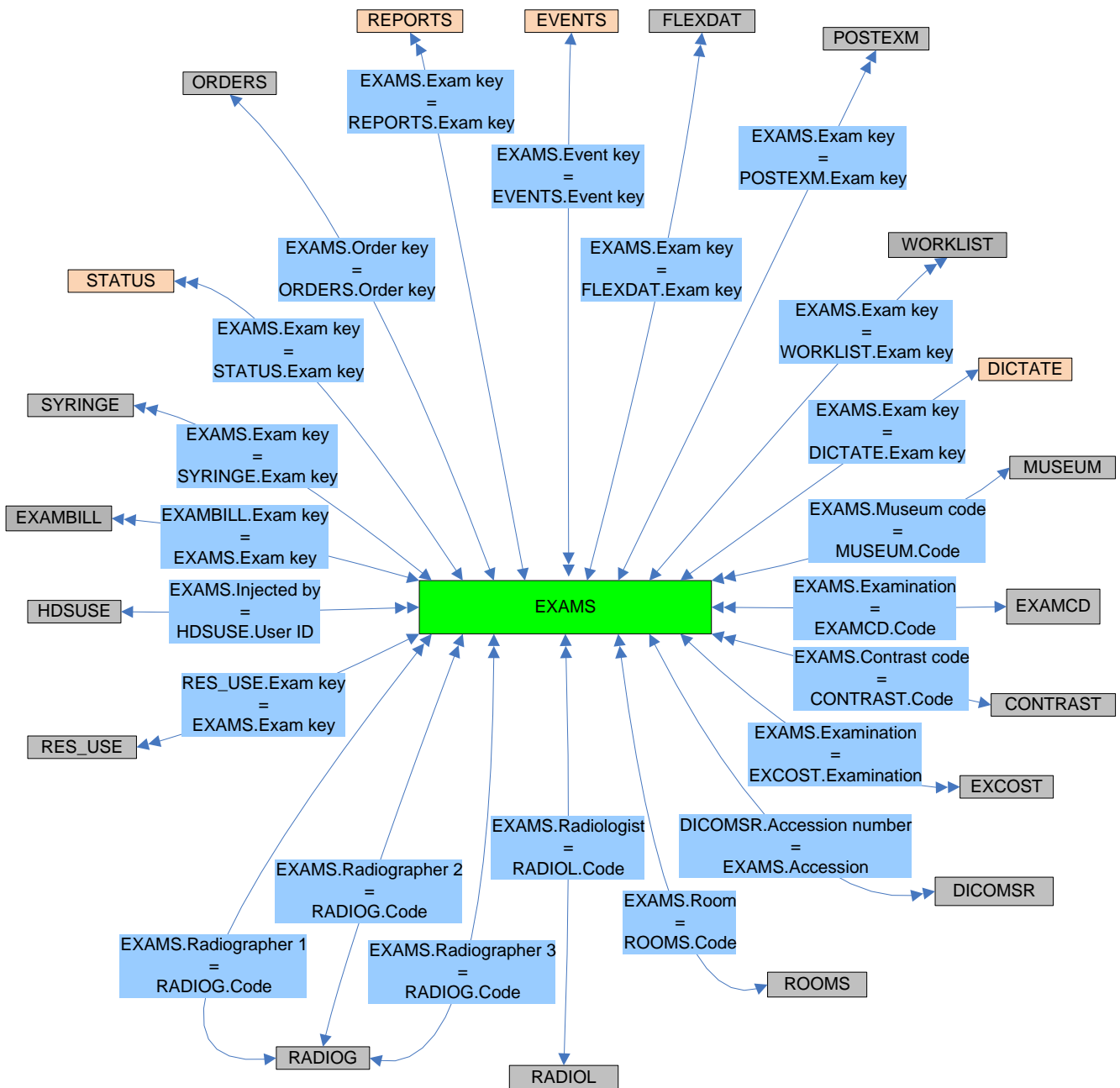
## EXAMCDH LINKS



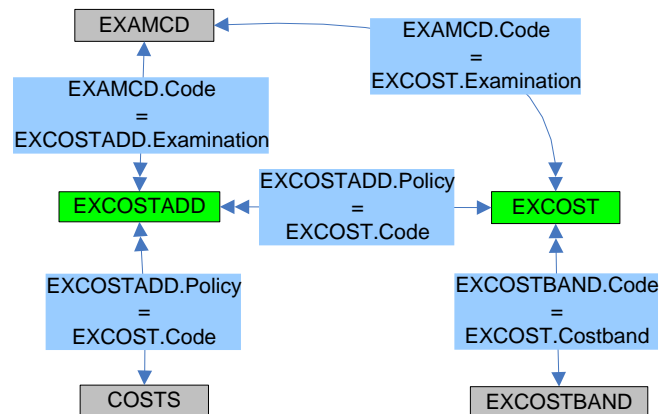
## EXAMPROTOCOLS LINKS



## EXAMS LINKS



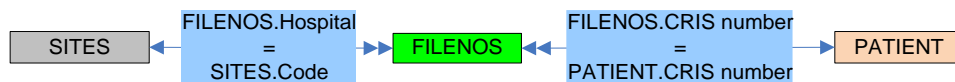
## EXCOST / EXCOSTADD LINKS



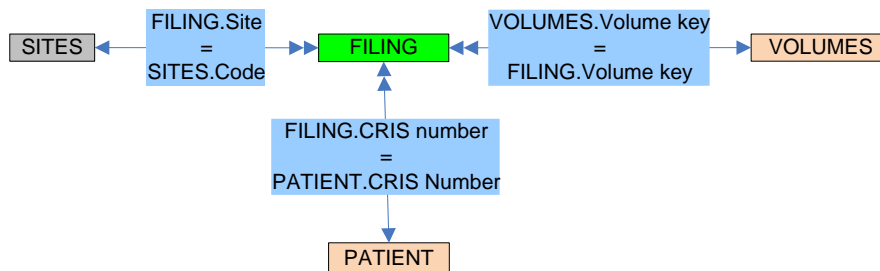
## EXCOSTBAND LINKS



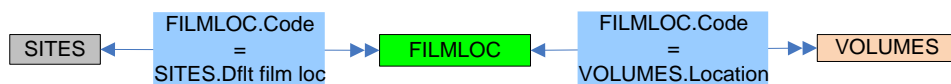
## FILENOS LINKS



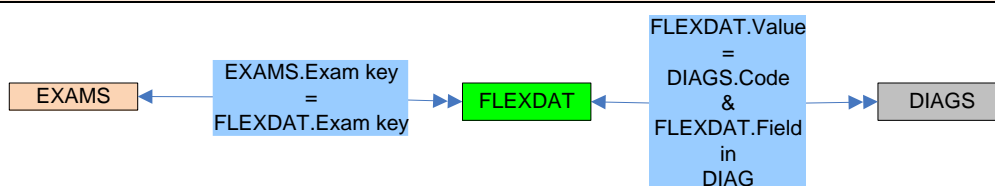
## FILING LINKS



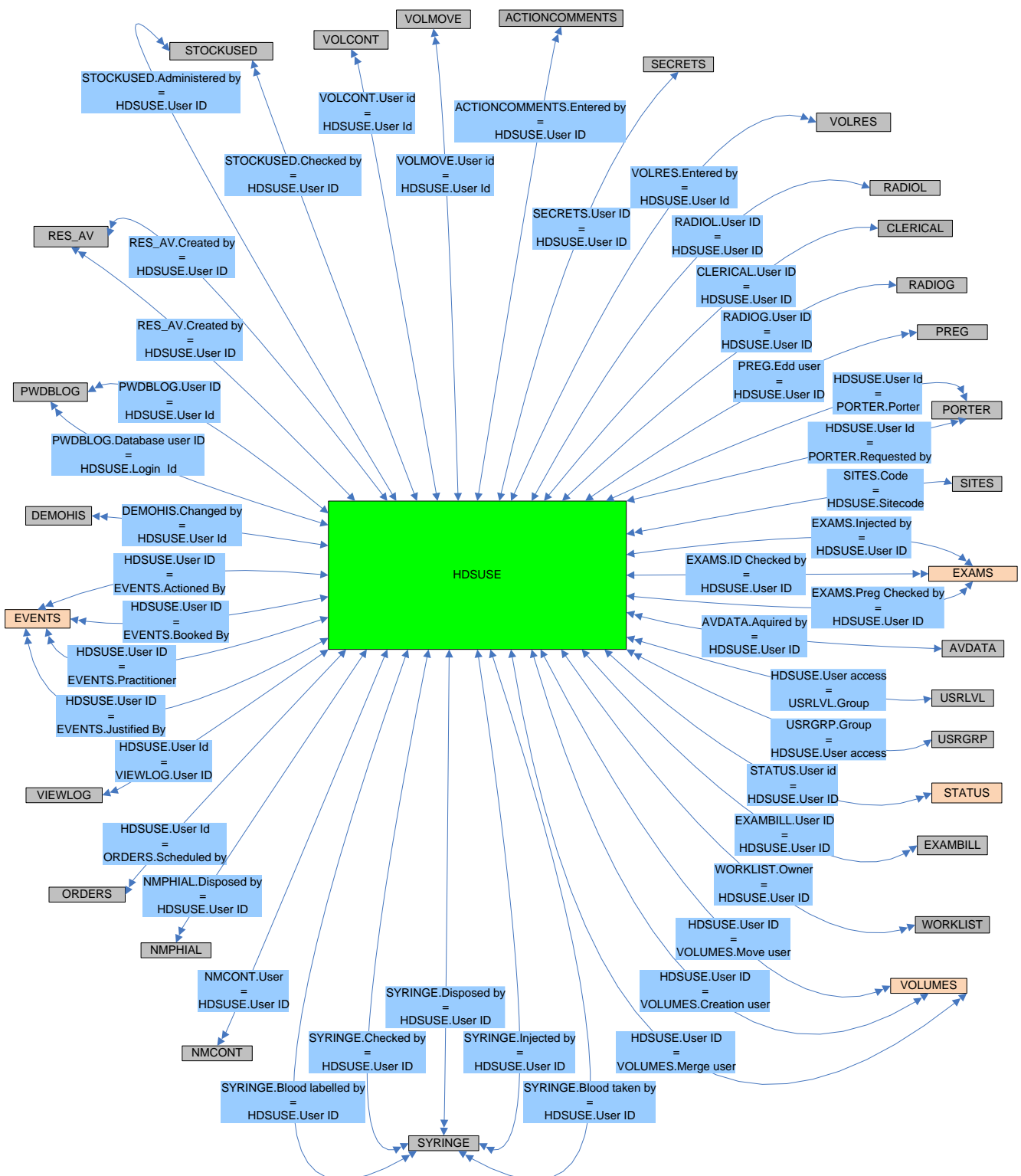
## FILMLOC LINKS



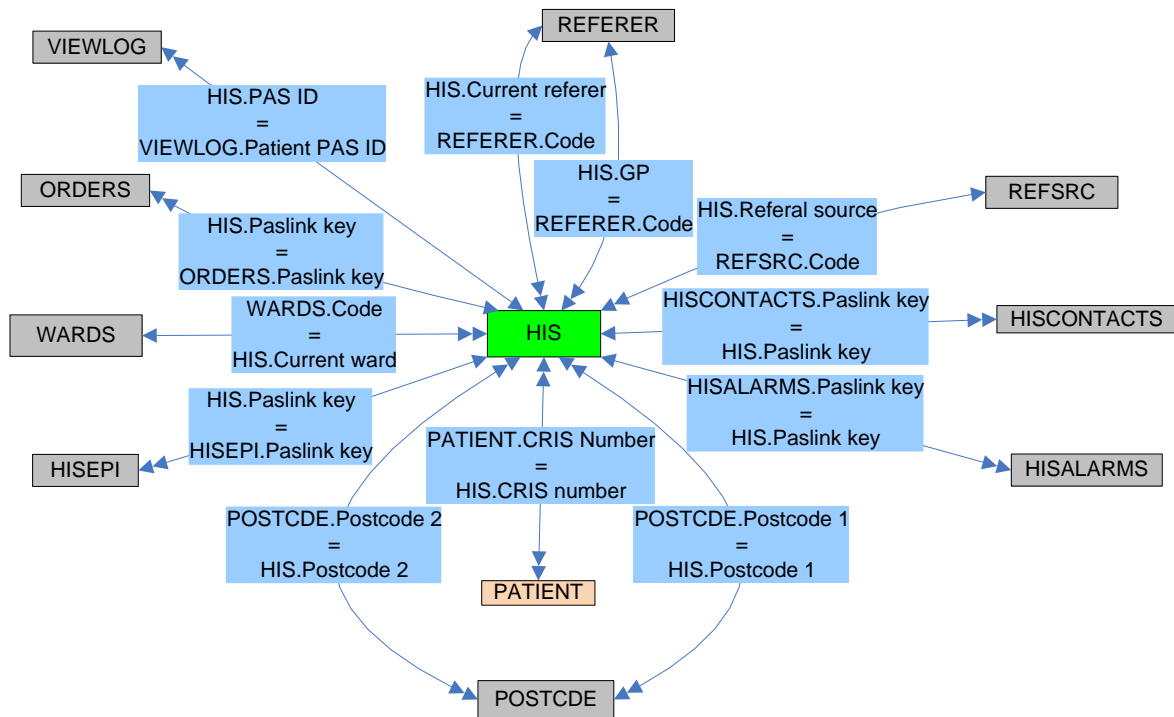
## FLEXDAT LINKS



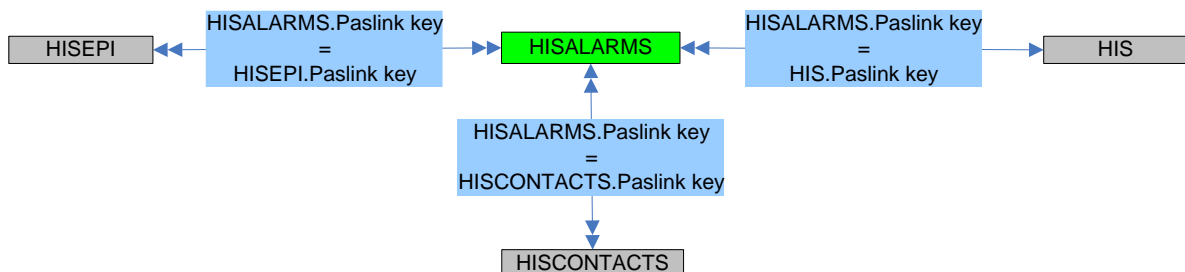
## HDSUSE LINKS



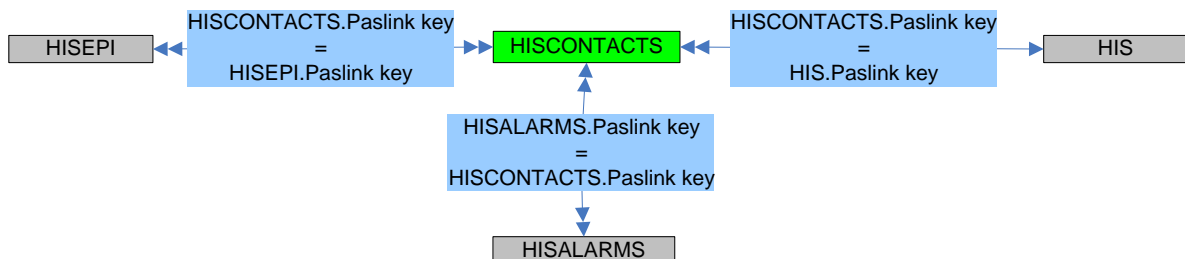
## HIS LINKS



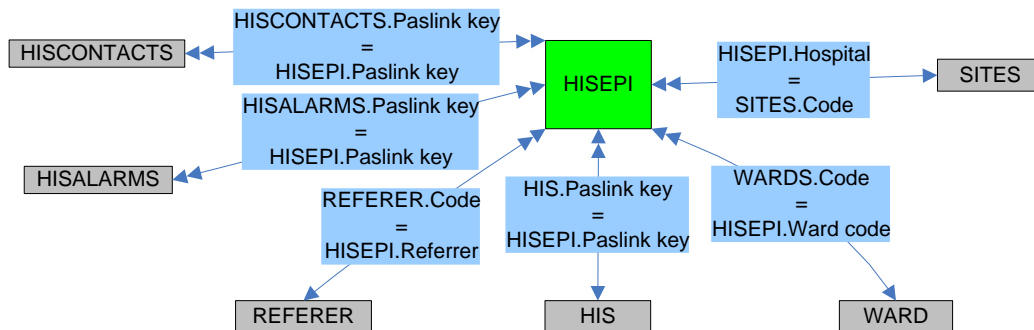
## HISALARMS LINKS



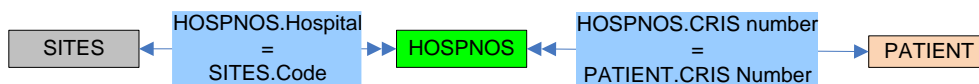
## HISCONTACTS LINKS



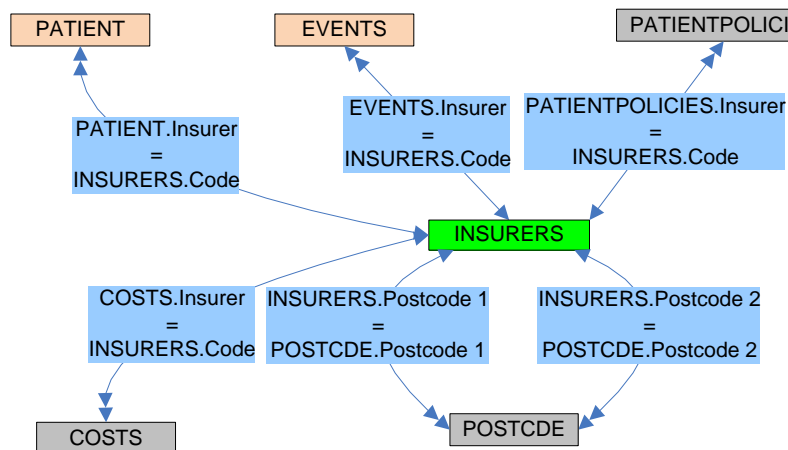
## HISEPI LINKS



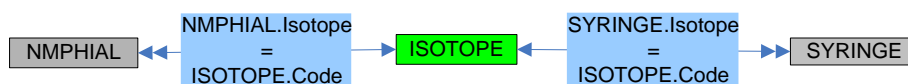
## HOSPNOS LINKS



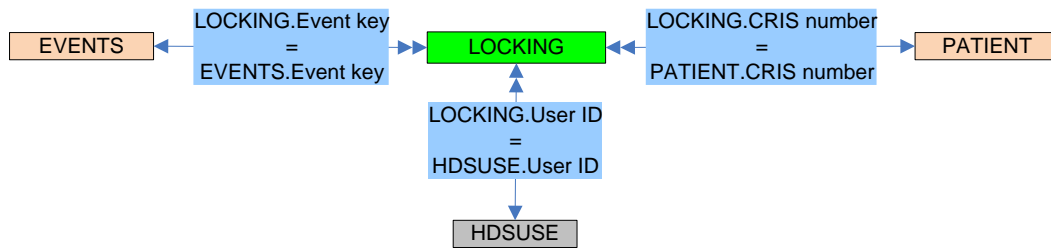
## INSURERS LINKS



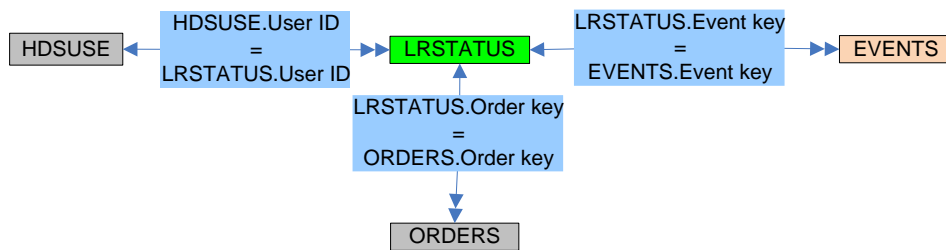
## ISOTOPE LINKS



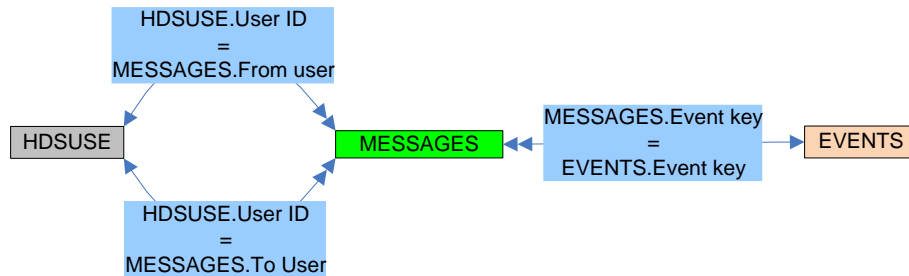
## LOCKING LINKS



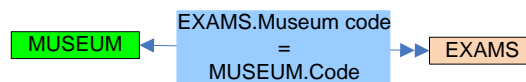
## LRSTATUS LINKS



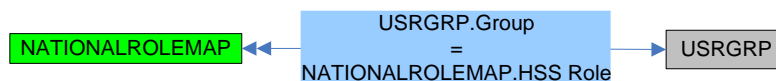
## MESSAGES LINKS



## MUSEUM LINKS

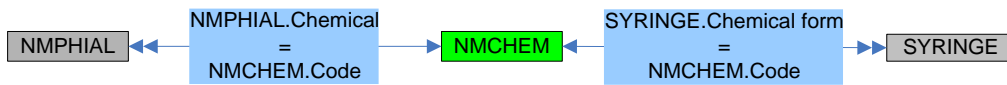


## NATIONALROLEMAP LINKS

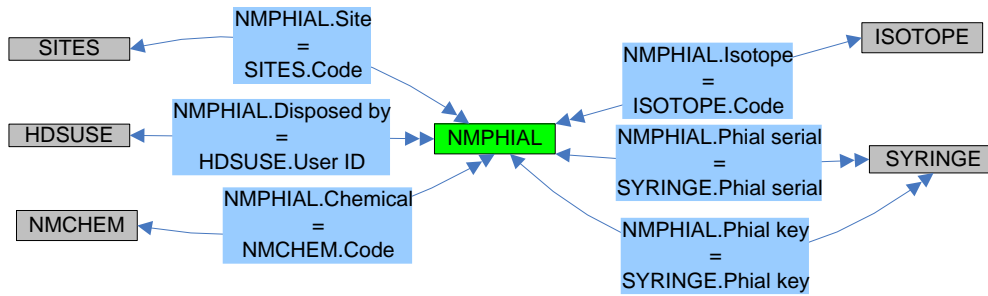




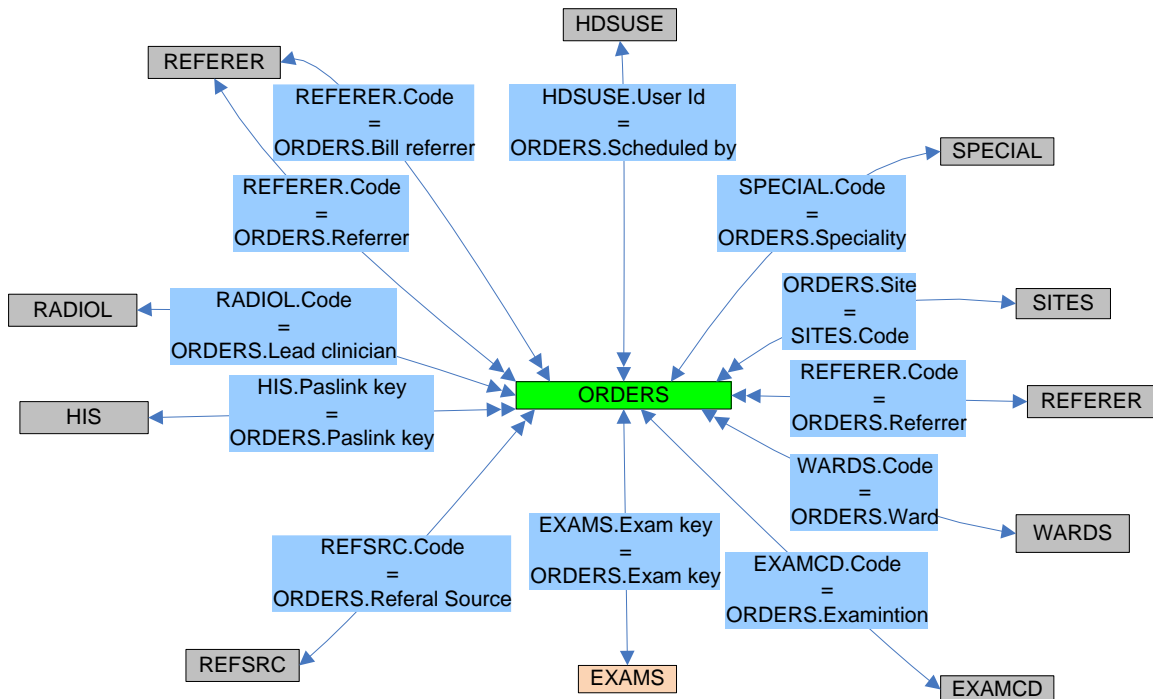
## NMCHEM LINKS



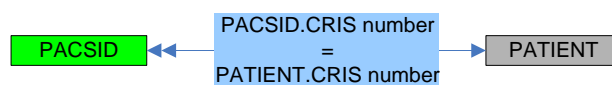
## NMPHIAL LINKS



## ORDERS LINKS



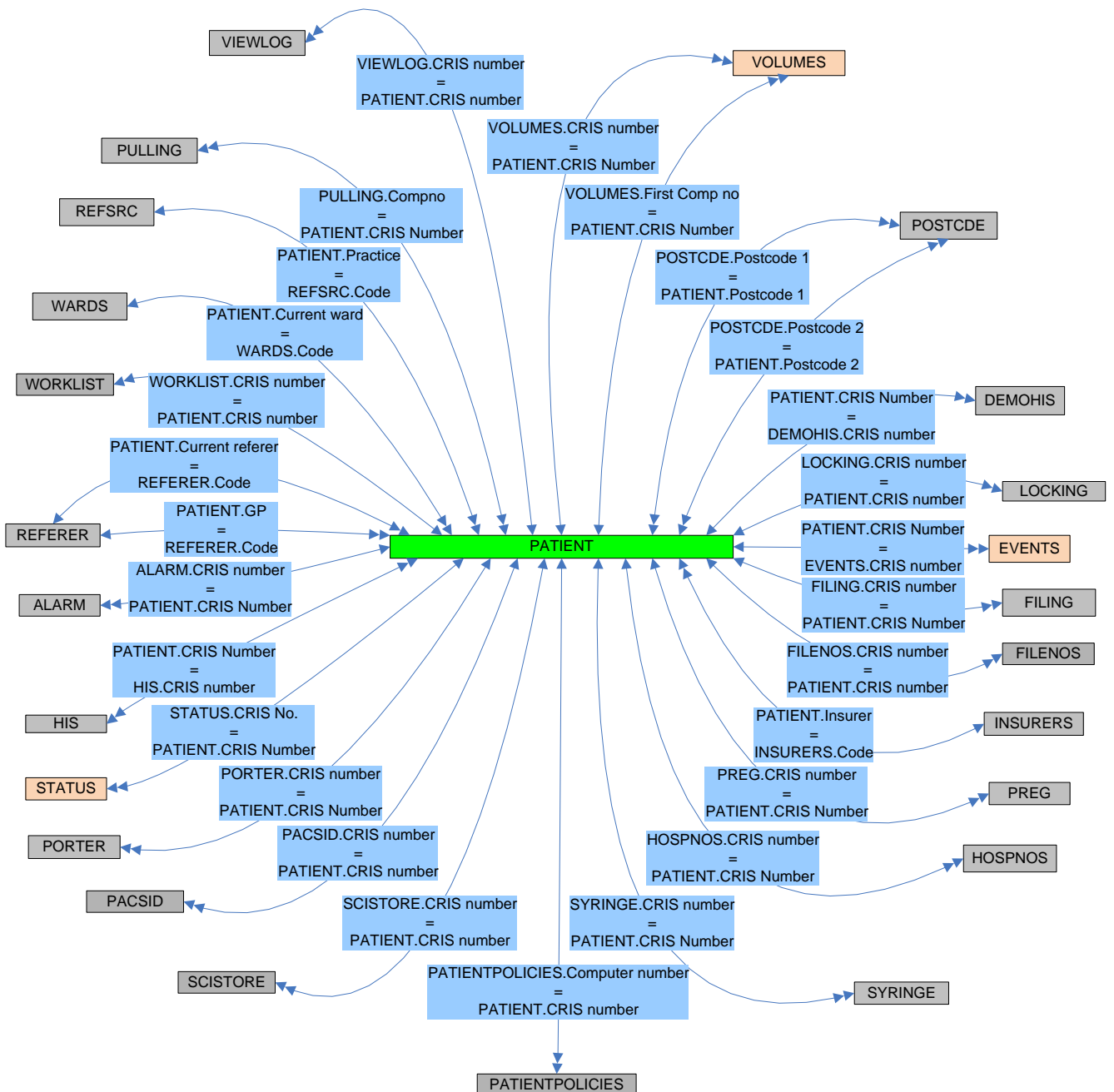
## PACSID LINKS



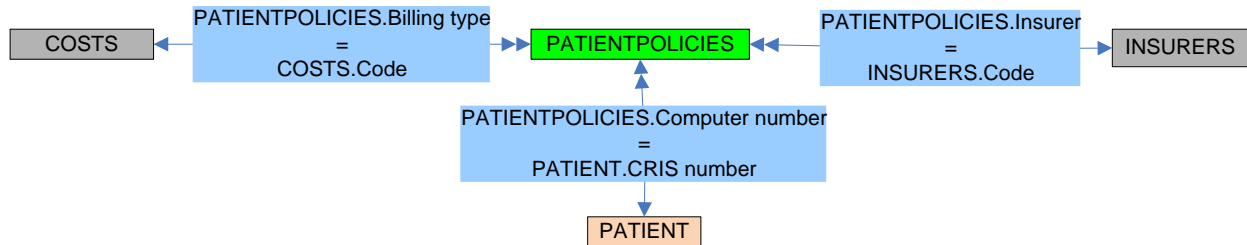
## PARTICIPANTS LINKS



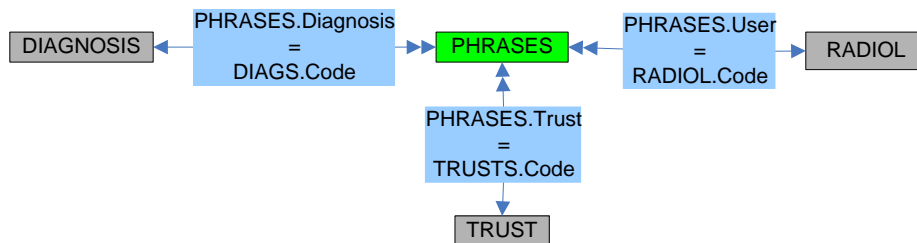
## PATIENT LINKS



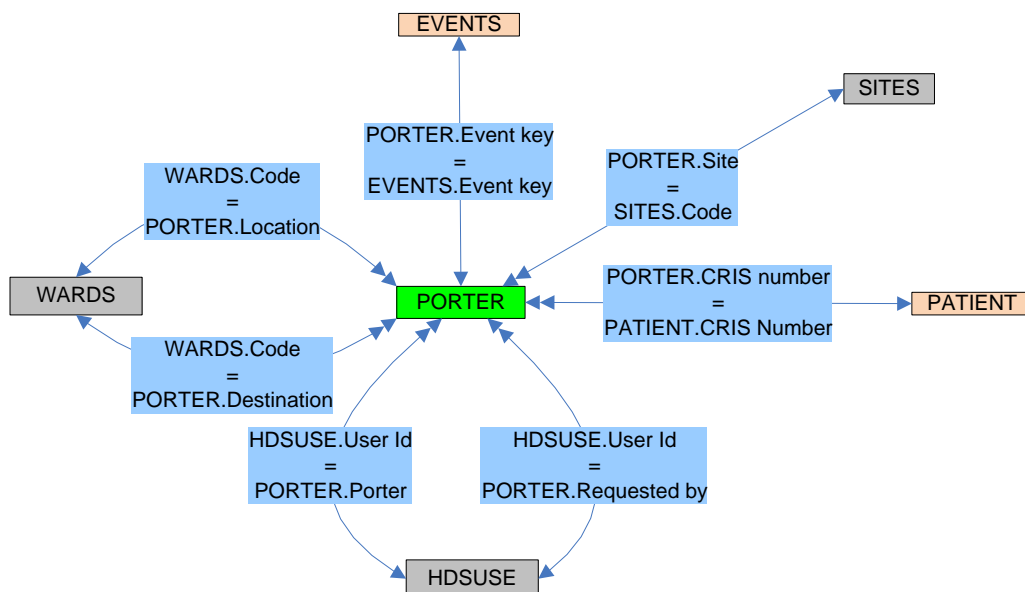
## PATIENTPOLICIES LINKS



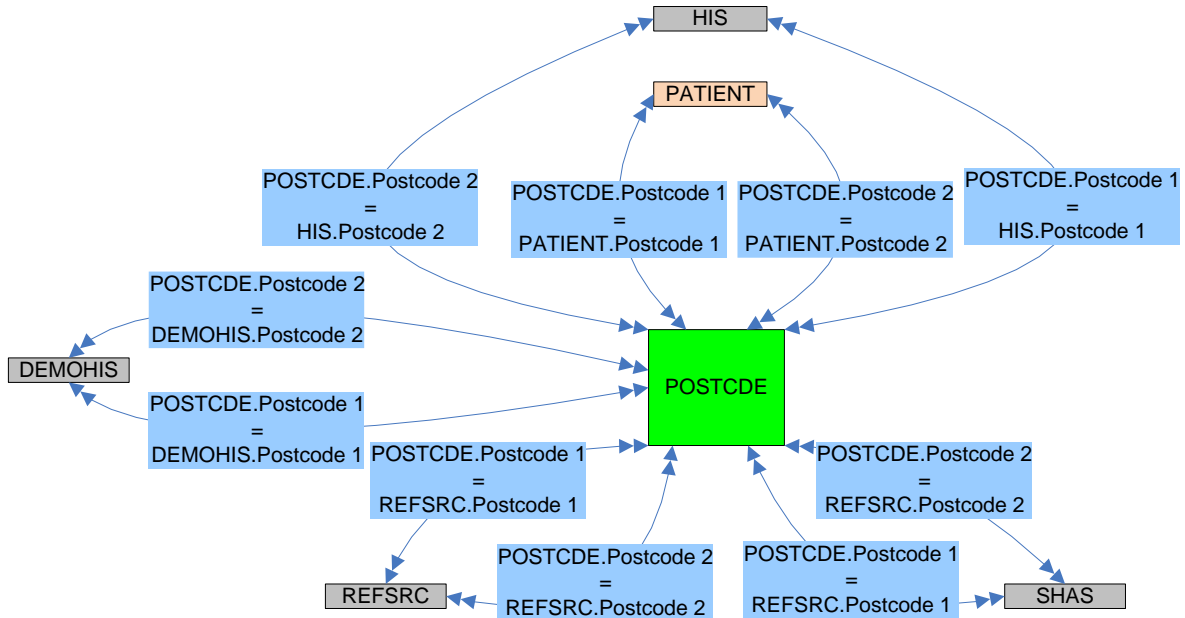
## PHRASES LINKS



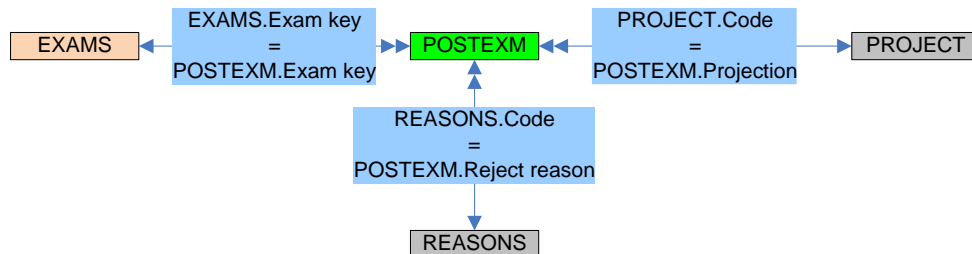
## PORTER LINKS



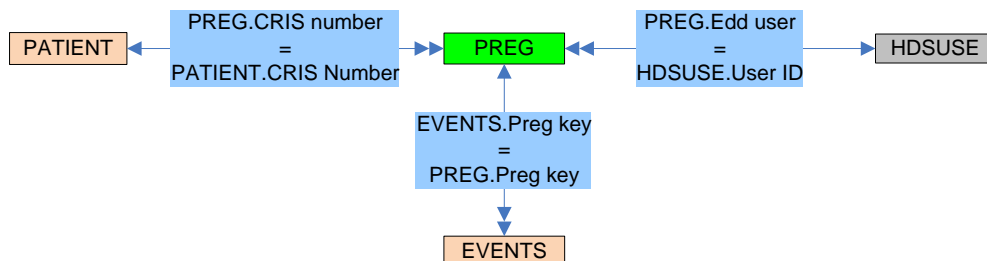
## POSTCDE LINKS



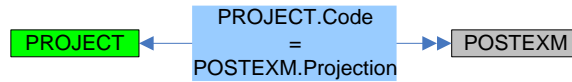
## POSTEXM LINKS



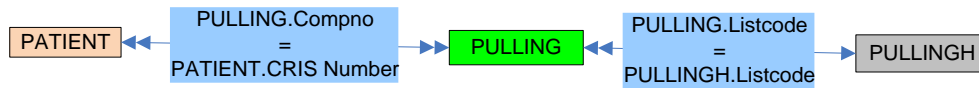
## PREG LINKS



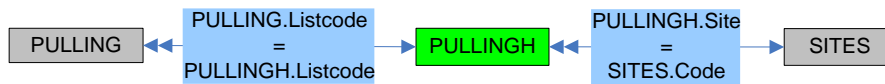
## PROJECT LINKS



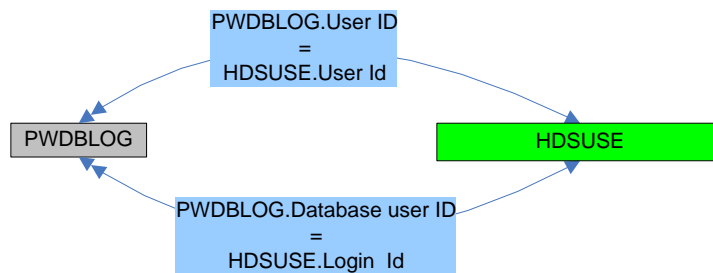
## PULLING LINKS



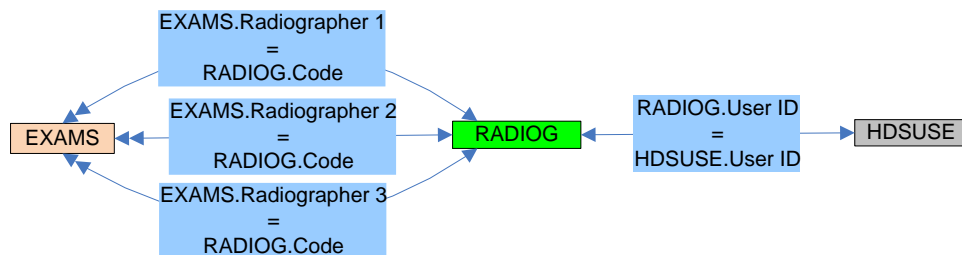
## PULLINGH LINKS



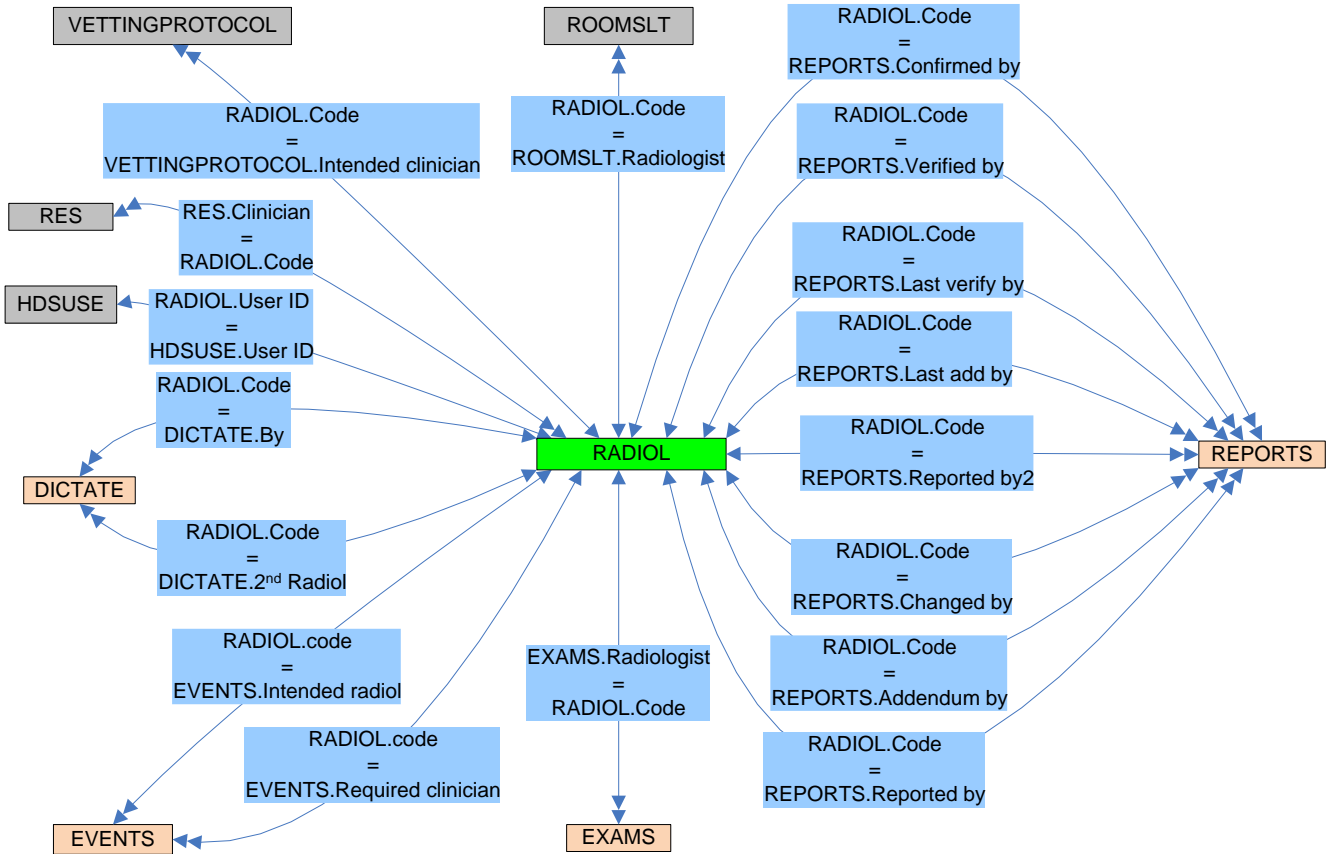
## PWDBLOG LINKS (USER LOGIN ACTIVITY)



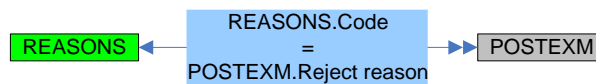
## RADIOG LINKS



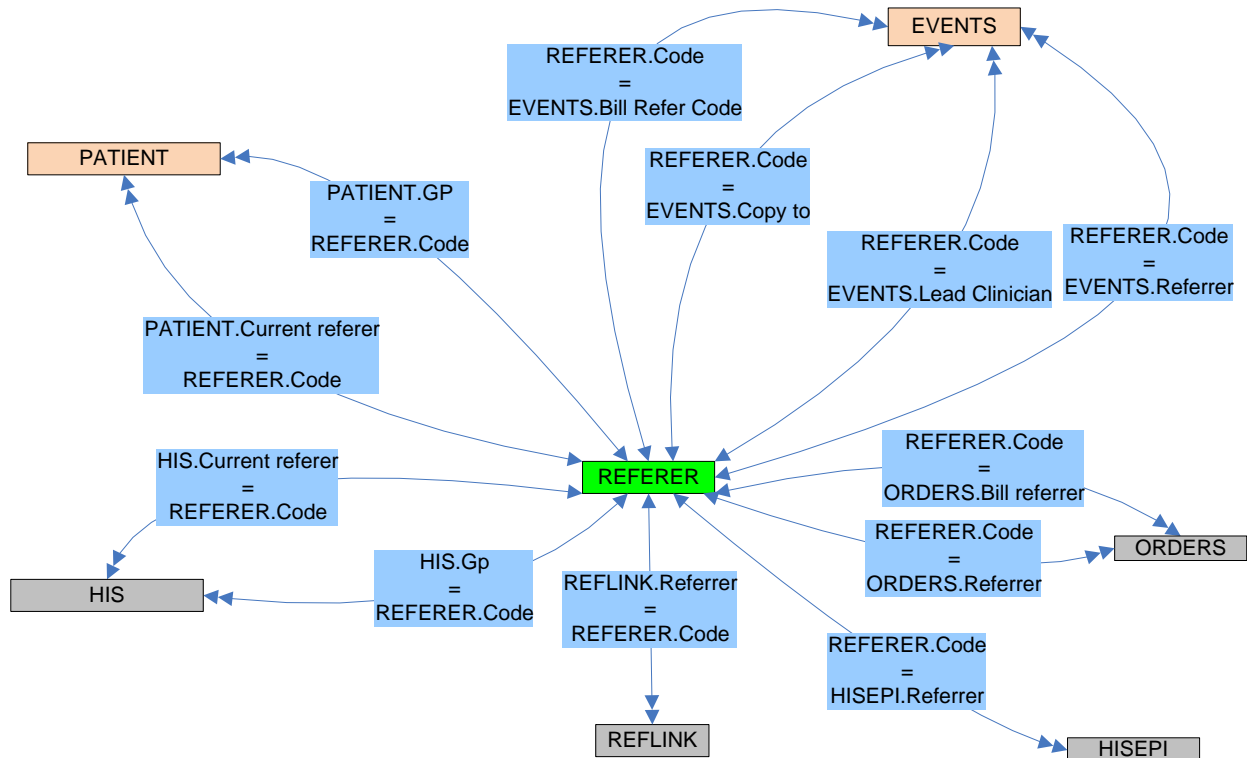
## RADIOL LINKS



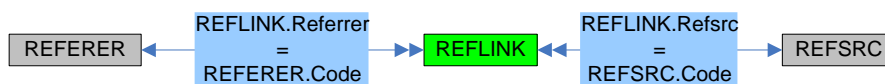
## REASONS LINKS



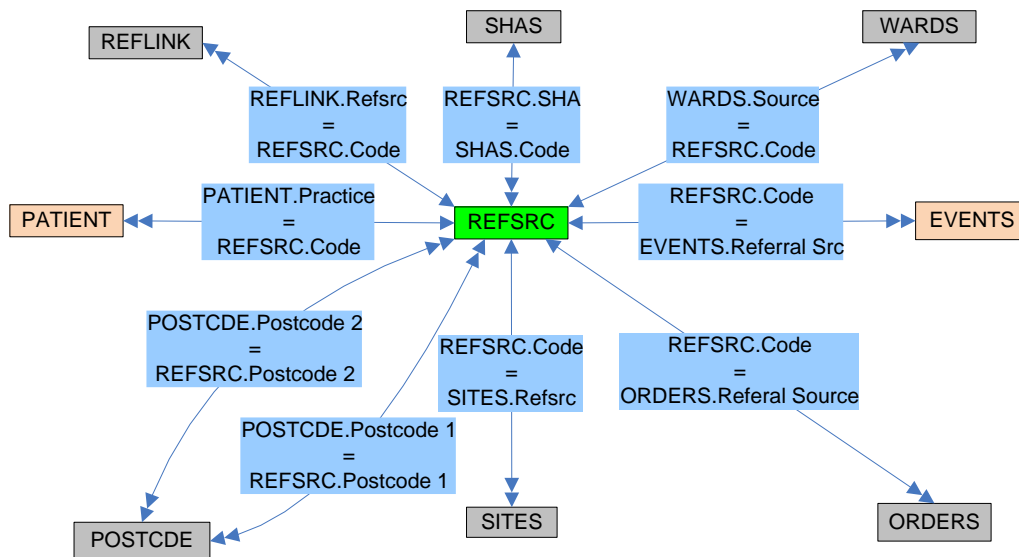
## REFERER LINKS



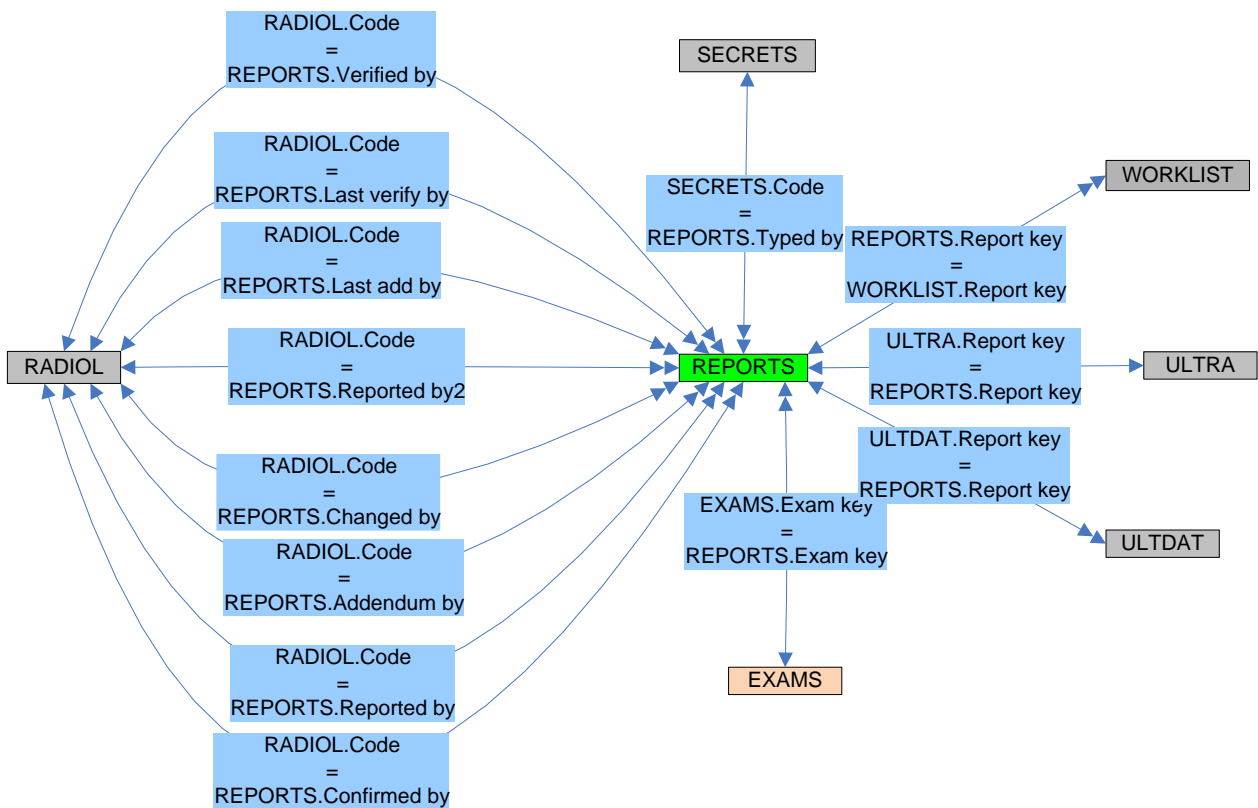
## REFLINK LINKS



## REFSRC LINKS

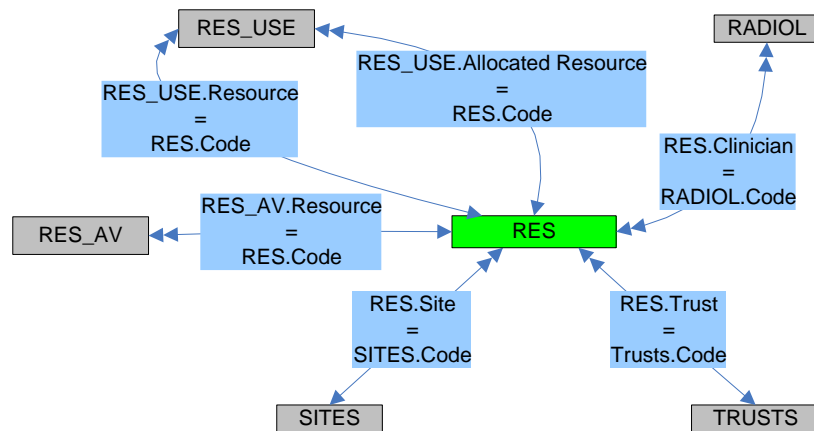


## REPORT LINKS

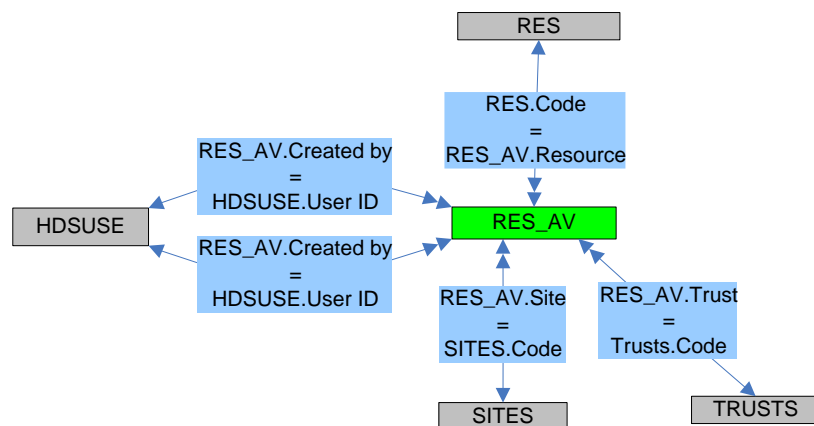




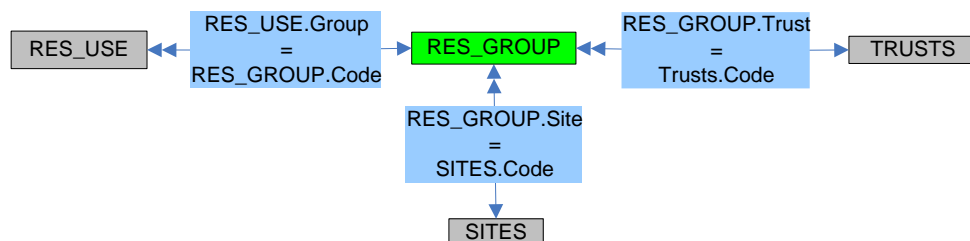
## RESOURCE LINKS



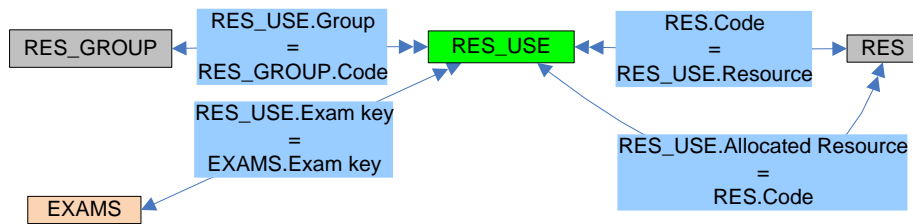
## RES\_AV LINKS



## RES\_GROUP LINKS



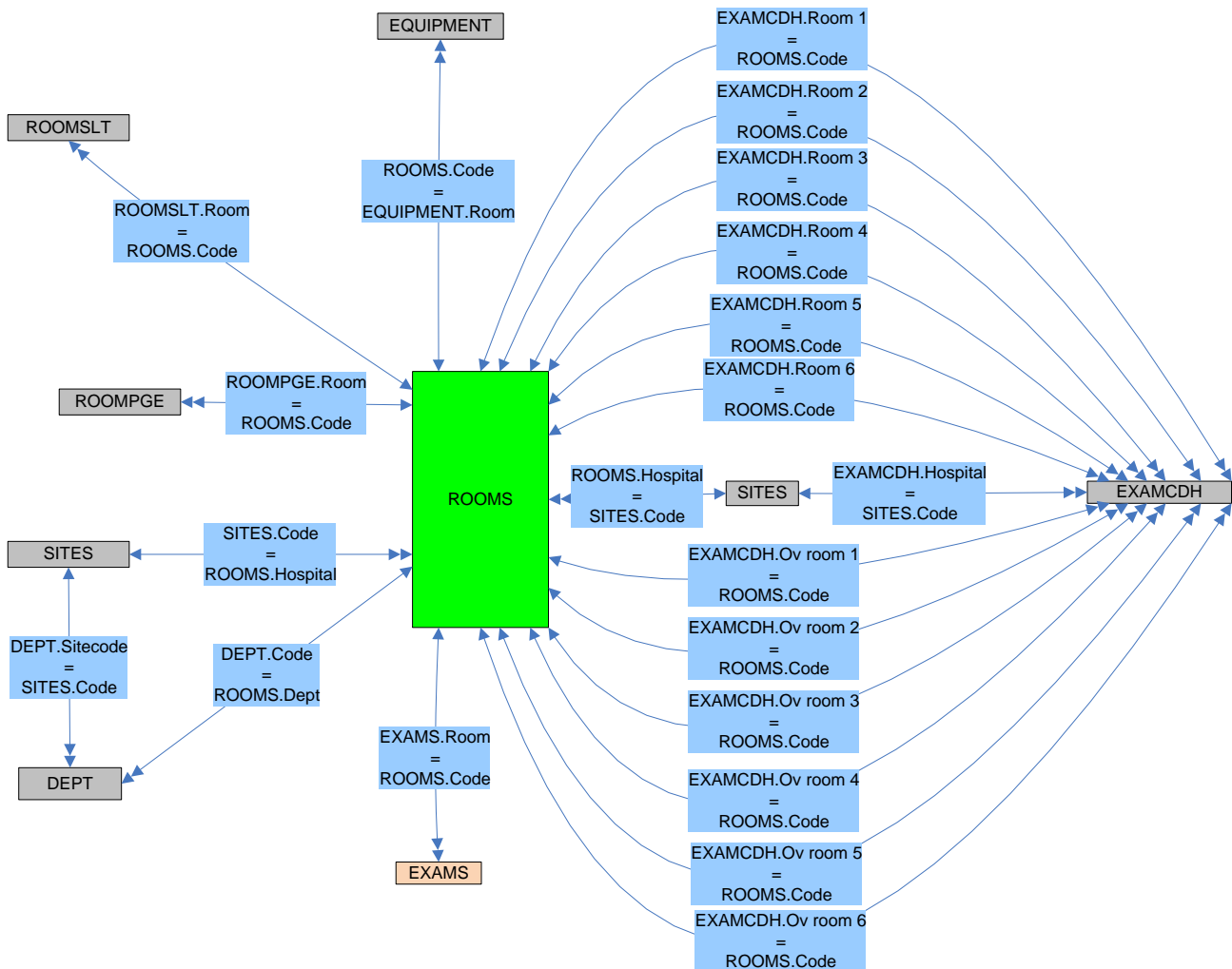
## RES\_USE LINKS



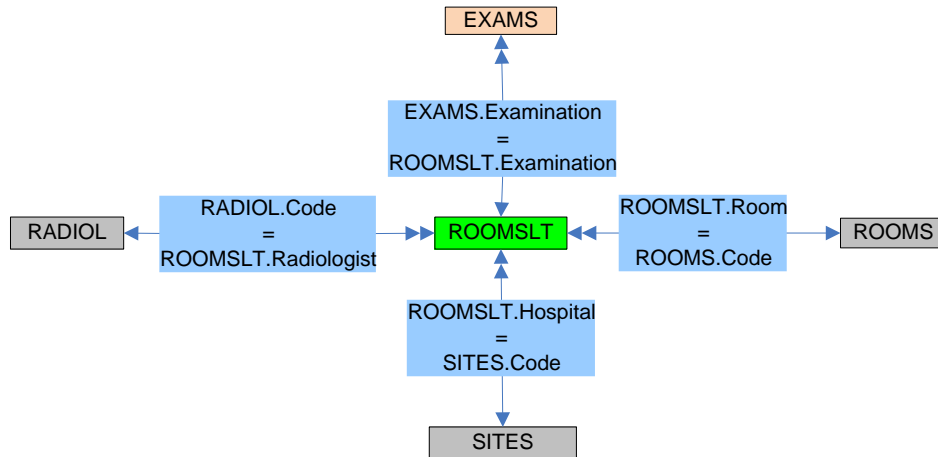
## ROOMPGE LINKS



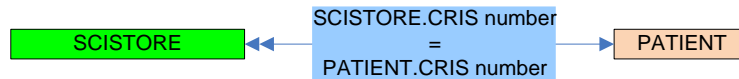
## ROOMS LINKS



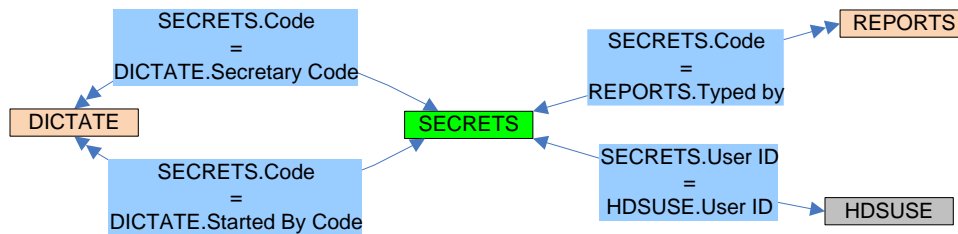
## ROOMSLT LINKS



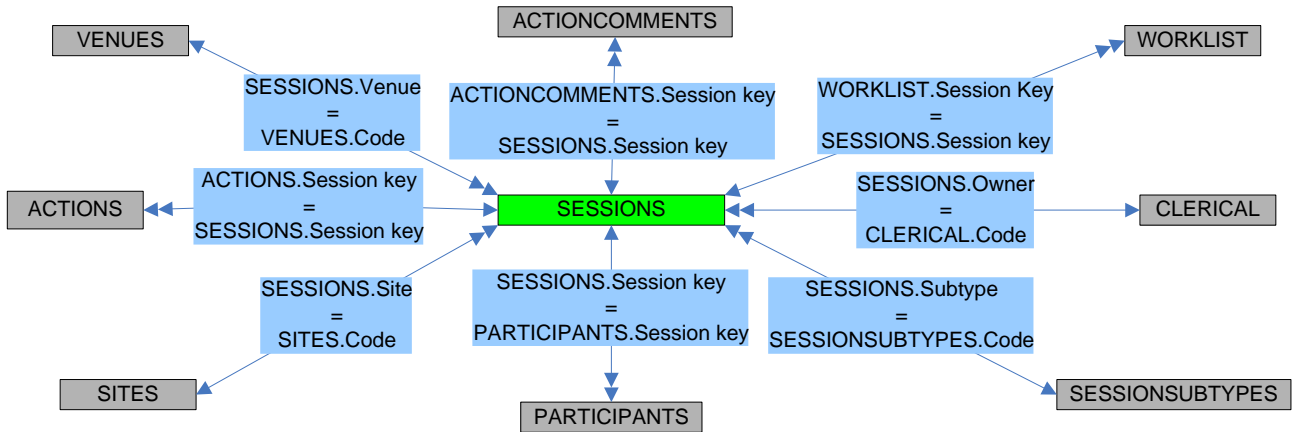
## SCISTORE LINKS



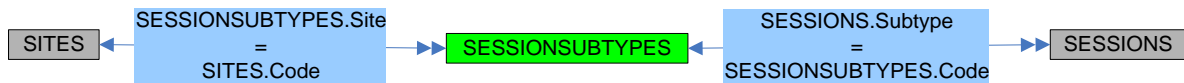
## SECRETS LINKS



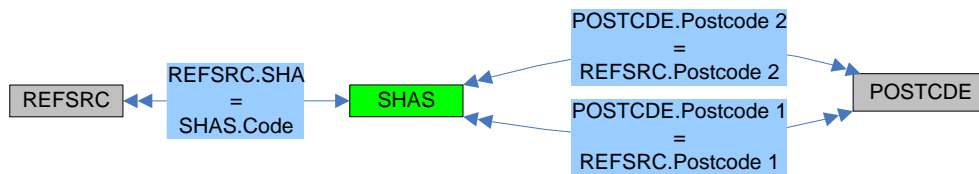
## SESSIONS LINKS



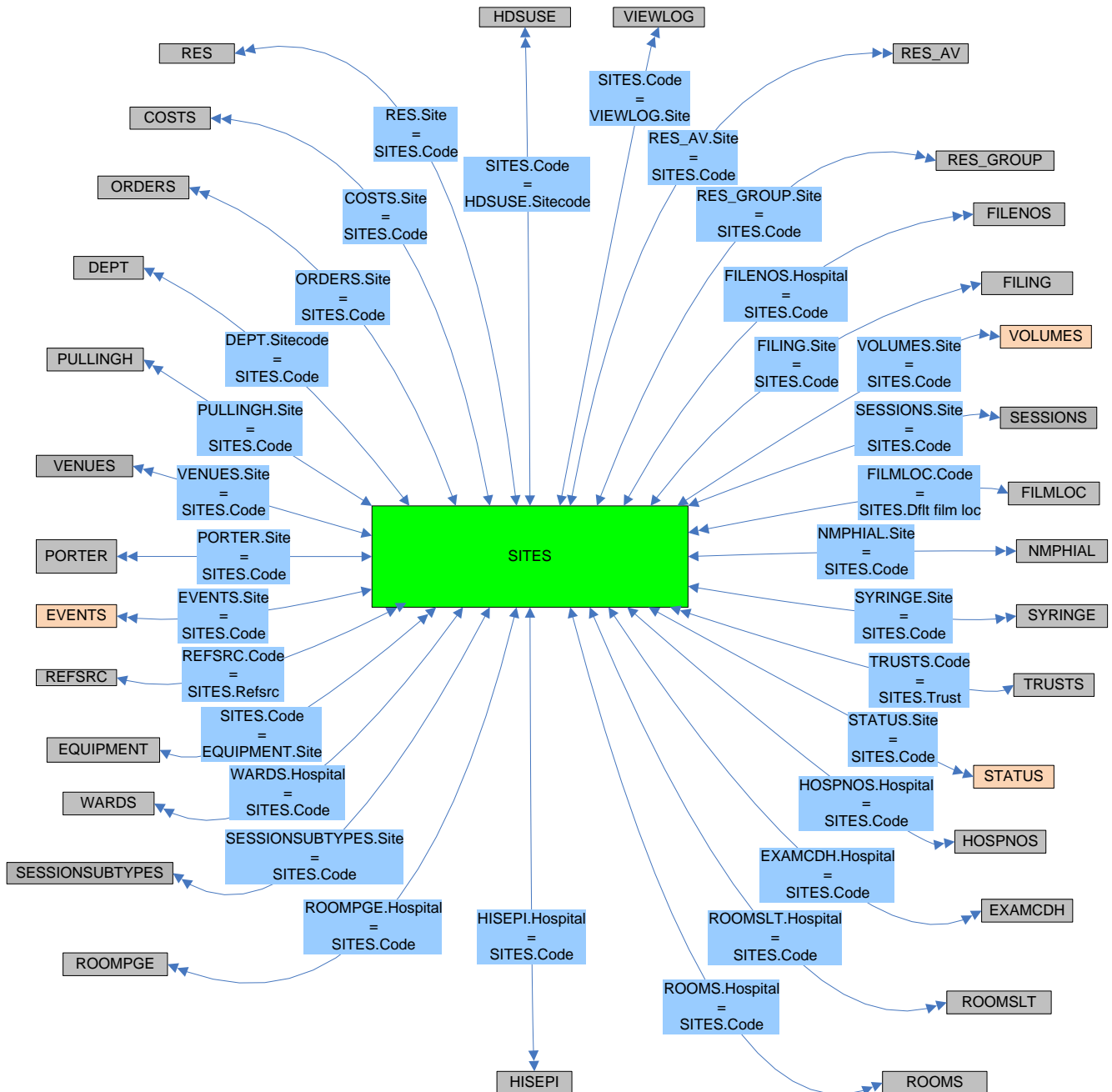
## SESSIONSUBTYPES LINKS



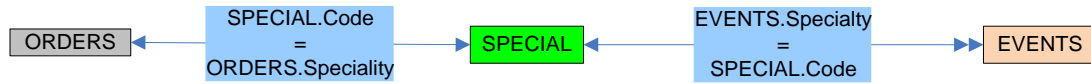
## SHA'S LINKS



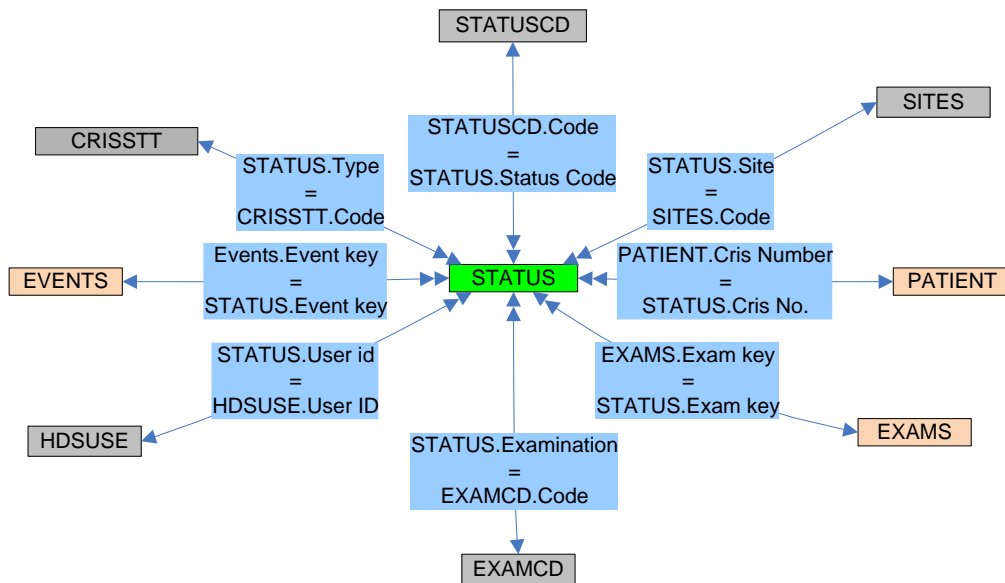
## SITES LINKS



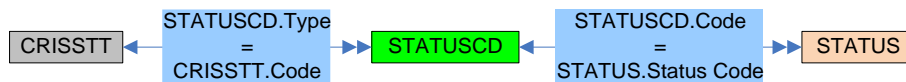
## SPECIAL LINKS



## STATUS LINKS



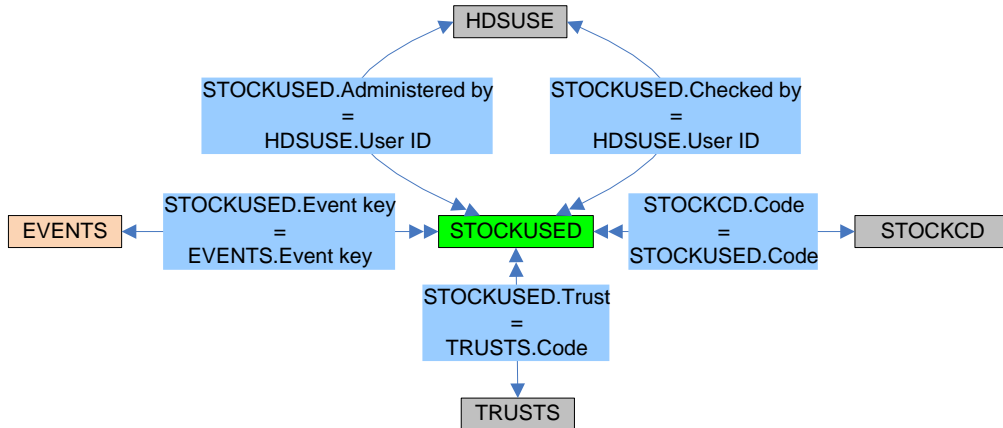
## STATUSCD LINKS



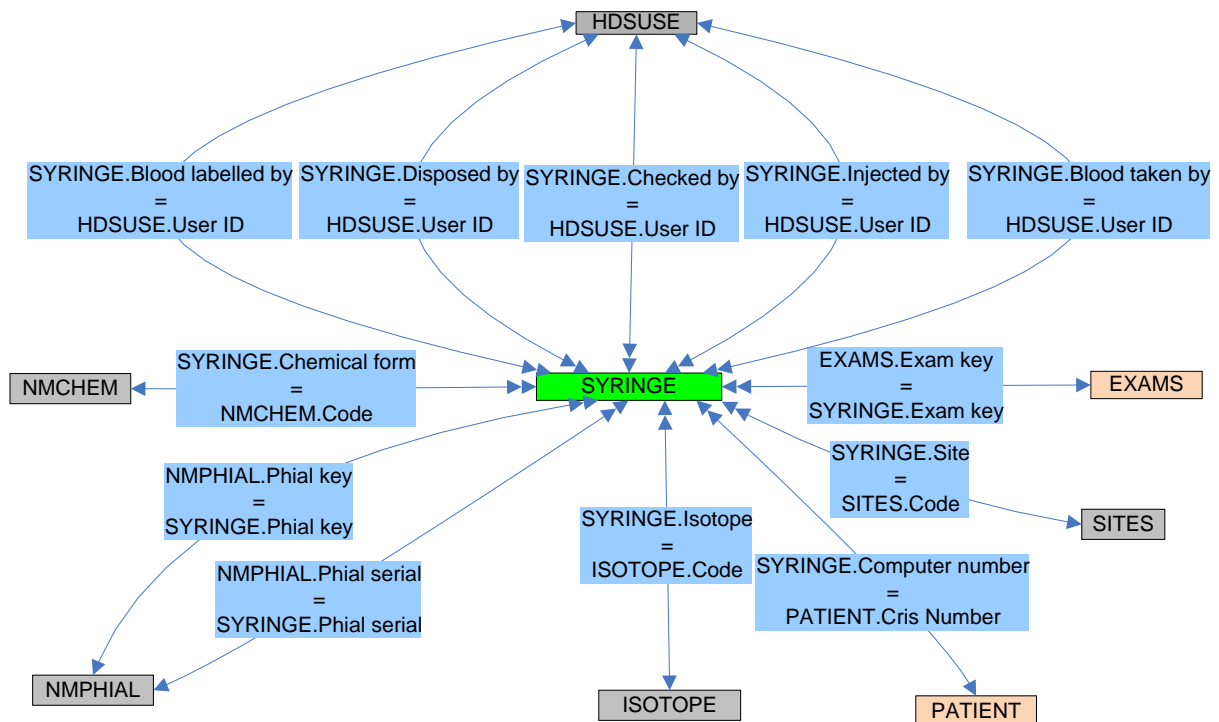
## STOCKCD LINKS



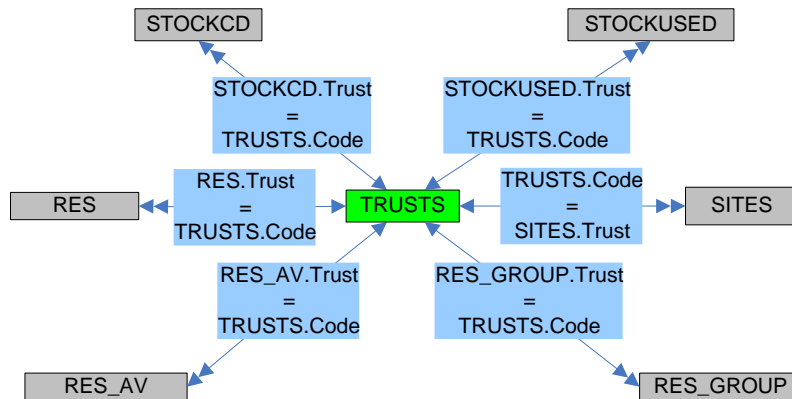
## STOCKUSED LINKS



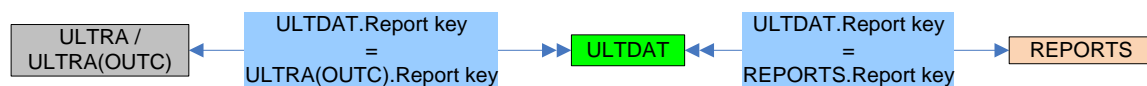
## SYRINGE LINKS



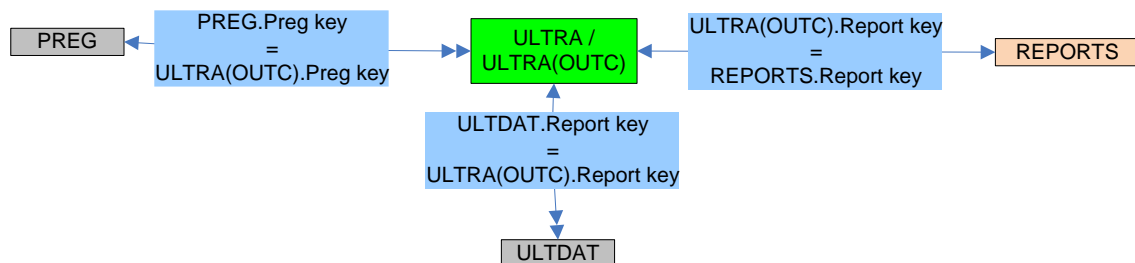
## TRUSTS LINKS



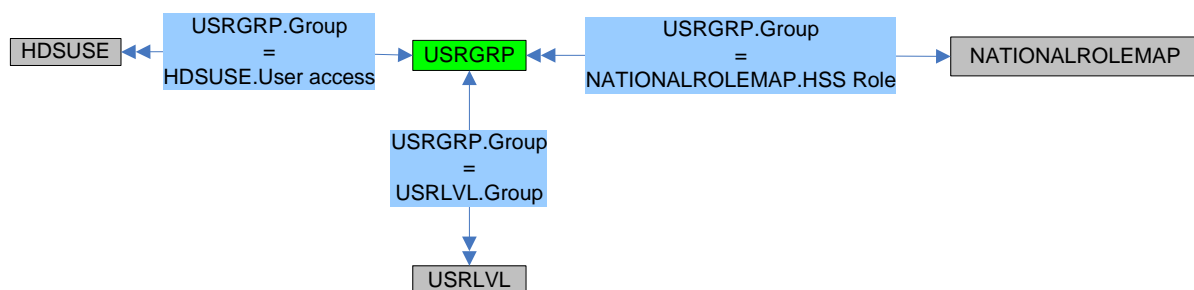
## ULTDAT LINKS (OBSTETRIC DATA)



## ULTRA / ULTRAOUTC LINKS (OBSTETRIC DATA)



## USRGRP LINKS (STAFF TABLE – USER LEVEL ACCESS)





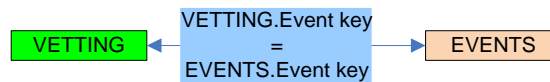
## USRLVL LINKS



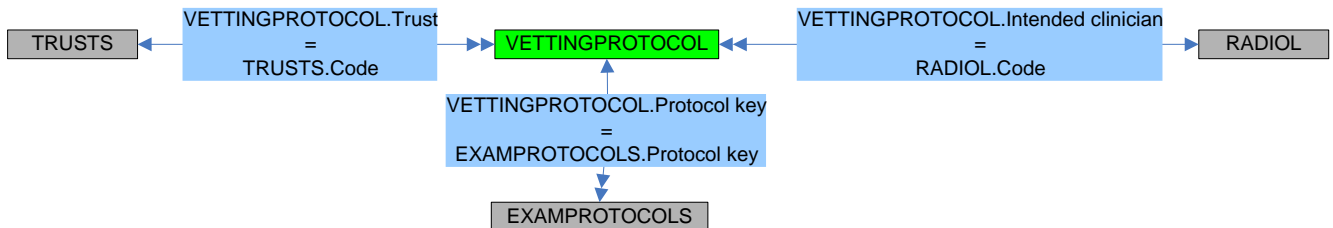
## VENUES LINKS



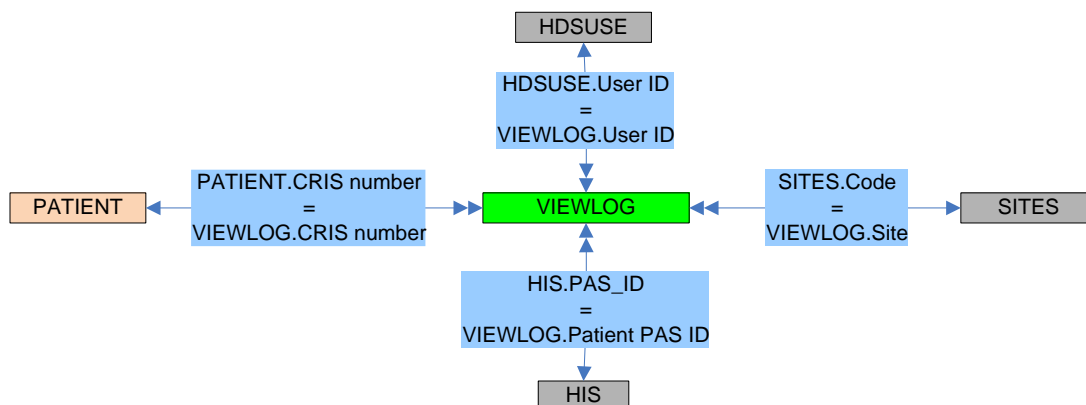
## VETTING LINKS



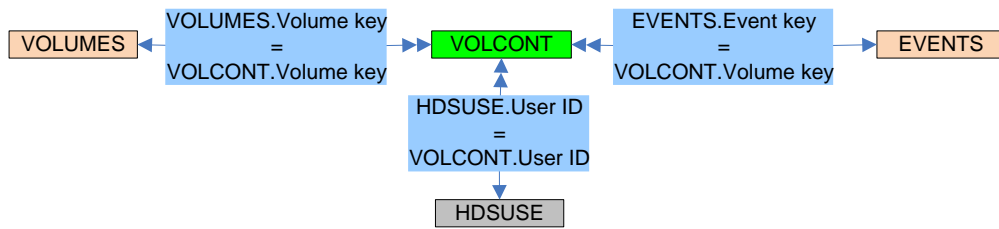
## VETTINGPROTOCOL LINKS



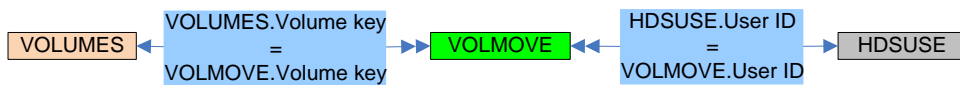
## VIEWLOG LINKS



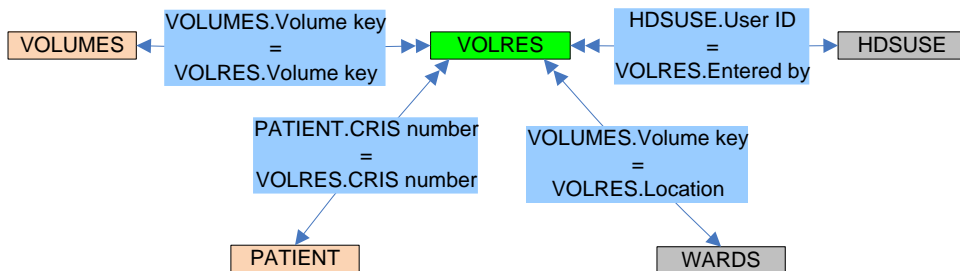
## VOLCONT LINKS



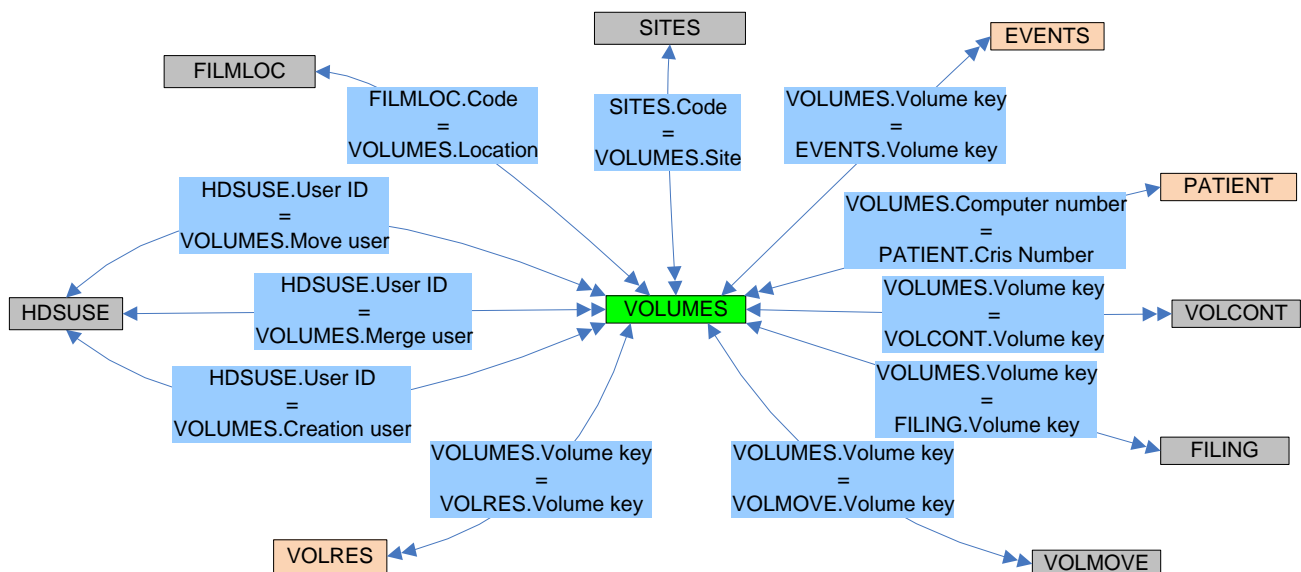
## VOLMOVE LINKS



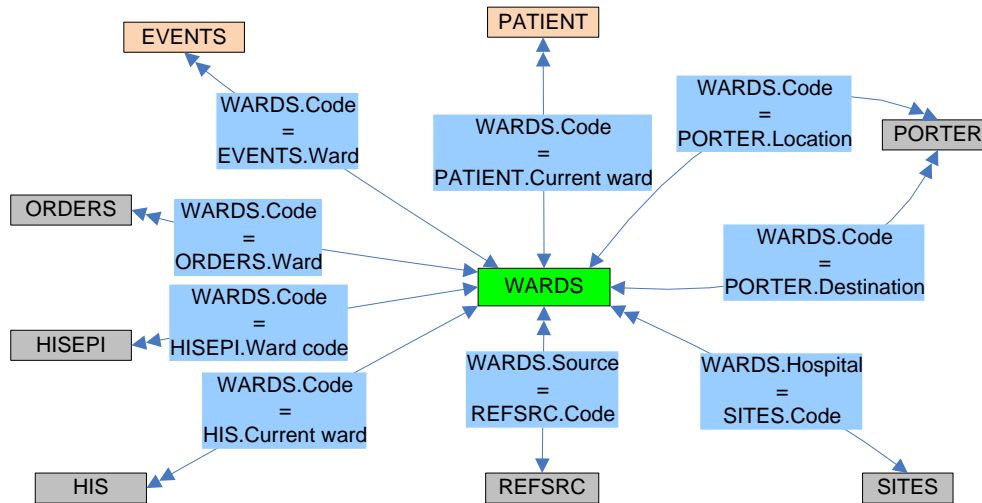
## VOLRES LINKS



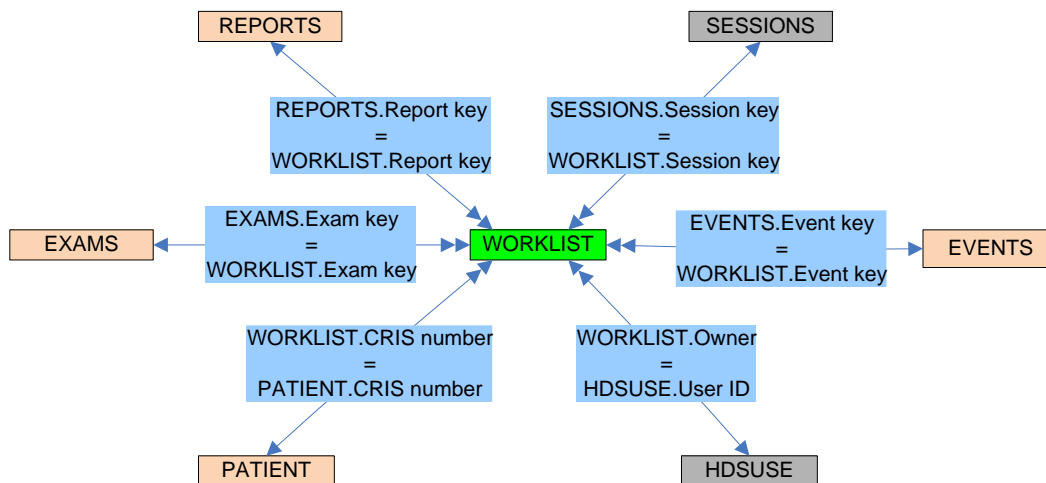
## VOLUMES LINKS



## WARDS LINKS



## WORKLIST LINKS



## Document Control

Title	Statistical Reports Manual		
Author	HSS Training Manager	Date Created	08/05/2010
File Ref.	CRIS_CRIB_CM_278_Statistical Reports_V2.0.doc		
CRIS Version	2.09.10p		
Change History			
Issue	Date	Author / Editor	Details of Change
V1.0	08/05/2010	Steve Jennings	First Issue
V1.1	04/07/2011	David Costin	Amendments to version number for 2.09.10e
D1.0	05/08/2013	Stuart Forrest	Draft Issue
V2.0	10/02/2014	Emma Savage-Mady	Significant editing and amendments to clarify existing and new functionality ahead of first Issue for 2.09.10p
Review Date		01/06/2016	