

Patient Correction Procedure

Unlinking CRIS/PAS Records

Merging/Unmerging CRIS Duplicate Records

Correcting Records Allocated to the Wrong Patient

Correcting Multi Exam Orders



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Introduction

Purpose

The purpose of this document is to clarify patient correction procedures covering 'Unlinking CRIS > PAS Records', 'Merging and Unmerging CRIS Duplicate Records' and 'Correcting Records Allocated to the Wrong Patient'.

Please note: This process replaces the 'Move Event' function within CRIS which can only be used on stand-alone RIS systems without PACS or PAS links. 'Move Event' would only move RIS records for events that have been created against the wrong patient, but there is no corresponding HL7 message to PACS, so it is not recommended functionality. Any corrections required to PACS folders and images should be performed manually by a PACS administrator. RIS administrators should ensure that when a department has RIS and PACS, the RECEPTION> MOVE_EVENT security setting is set to 'No' for all users.

Audience

This document is primarily aimed at RIS and PACS System Managers in order to allow them to undertake correction of RIS/PACS records. CRIS Trainers, Trust Trainers and Key Users also need to be aware of the correct procedures in order to advise on best practice.



Document Control

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Glossary of Terms

Consortium Radiology System Management User Group

Generic term used to indicate that in some cases the procedures outlined in this document will require the reciprocal RIS and PACS System Managers at each Trust to liaise with their colleagues acting in the same capacity across the Consortium. This is not applicable to single Trust deployments.

Linking & Unlinking 'PAS' Records

'Linking' is a term which relates to creating a relationship / link between a CRIS Radiology patient record and the reciprocal PAS patient record at the local Trust to enable demographic updates, the receipt of electronic requests / orders and transmission of order updates and clinical results.

Linking PAS Records

There should only ever be one CRIS 'Radiology' patient record on the system, but this can be linked to multiple Trust PAS systems when deployed within a Consortium or Datacentre model. Each Trust will see only their own Hospital Numbers by default, although other Trust PAS numbers can be seen by hovering over the hospital numbers field within the patient banner at the top of the screen.

Unlinking PAS Records

If a PAS record is incorrectly linked to a CRIS Radiology patient record it will be necessary to investigate the details of the original CRIS patient record and inform any other Trusts who share the record and may be affected by inaccurate demographic details resulting from the incorrect link. It is only possible to unlink a PAS record for your own Trust, and you would then need to ensure that you manually restore the demographic details via CRIS or identify and link the correct patient.

If any requests or attendances have taken place since the records were linked it may be necessary to recreate these on the correct Patient record and cancel on the original.

Duplicate CRIS Radiology Patients Records (Merging and Unmerging)

Merging Duplicate Records

There should only be one **blue** radiology patient record for use throughout the entire consortium CRIS radiology system. If you notice there is more than one **blue** radiology record, this indicates a 'Radiology Duplicate Record' which will need to be merged to the primary CRIS record (usually indicated by the lowest CRIS number).

SCENARIO ONE: The Radiology duplicates all have Hospital Numbers from your own Trust.

ACTION: Inform PAS who will merge the records via PAS which will automatically update the CRIS. This merge message will also merge any image folders on PACS.

SCENARIO TWO: One (or more) of the Radiology duplicates do not have Hospital Numbers from your own Trust.

ACTION: If one (or more) of the Radiology Duplicates do not have Hospital Numbers from your own Trust it is likely that they were created at another Trust within the Consortium or as a result of Data Migration. You will therefore need to raise this via 'The Consortium Radiology System Management User Group' as it will be necessary to co-ordinate any merges or unmerges of records across the Consortium to ensure that you can establish the correct Patient Demographic and Radiology Patient records for each site as well as undertake any re-labelling which may also be required before / after merging.



Unmerging Duplicate Records

This is a relatively rare process which is required either in the event the two CRIS Radiology record have been incorrectly linked, or more commonly if correct patient records were merged without migrating all valid PAS records (for all Trusts) to the lead patient. If the duplicate merge was undertaken via the PAS system, it should be corrected via the PAS system. Alternatively if the CRIS records were undertaken within Radiology and any Trust Hospital Numbers have been omitted it will be necessary to unmerge, transfer all relevant Hospital numbers and remerge the records.

Neither of these methods of unmerging will send a message to PACS. Studies on PACS will need to be manually updated / amended.

Unlinking Patients who have been linked to the wrong PAS record

If a CRIS radiology record has been linked to the wrong PAS record it will be necessary to check the overall patient record to establish if any other events on the record originated from another Trust in the consortium.

If the record is a consortium record, you will need to raise this via 'The Consortium Radiology System Management User Group' as it will be necessary to co-ordinate any unlinking of records across consortium to ensure that you can establish the correct patient demographic and radiology patient records as well as undertake any re-labelling which may also be required before unlinking.

Please note: Unlinking will only remove the link between the current CRIS record and the PAS record at your own Trust.

Consequently, if you wish to unlink all PAS records/hospital numbers from the current CRIS record it will be necessary for each Trust to unlink the record separately.

Additionally - Magentus has also been advised that some Trusts have found that the most effective method of 'Unlinking' a Trust record is to ensure that the first 'Unlink' should be undertaken by the Trust who created the record originally.

Magentus would therefore recommend that in these circumstances the Trust who has placed the first Event on the record should also be the first to 'Unlink'.

Alternatively, if just 'one' Trust has incorrectly linked a Hospital Number to the wrong Patient - they should be the one to unlink as this will restore the record to its original form prior to the (mis)link.

Unlinking Patient Records (PAS > CRIS)

Load the CRIS Radiology record and click on the 'Patient Details' screen. Click the [**HIS Details**] button on the right-hand side of the screen.

Surname	Forenames	Dob	Address	Changed	By
VADER	DARTH	30/10/1932	63 BROWETT ROAD,, COVENTRY, WARWICKSHIRE ...	07/02/2007	ESMTRAIN



Ensure the patient details are correct and select the [**Unlink**] button. This will remove the link between the RIS and PAS record **at the Trust you are logged in at** and the PAS link will be available again from the patient search for correct future linking.

If any requests or attendances have taken place since the records were linked it may be necessary to recreate these on the correct Patient record and cancel on the original using the '**Correcting CRIS/PACS Records allocated to the Wrong Patient**' instructions below.

Merging / Unmerging CRIS Duplicate Radiology Records

There should only be one **blue** radiology patient record for use across the entire consortium CRIS Radiology System. If you notice there is more than one **blue** radiology record, this indicates a 'Radiology Duplicate Record' which will need to be merged to the primary CRIS record (usually indicated by the lowest CRIS number though it is up to the Trust to decide as sometimes a more recent record has more activity).

SCENARIO ONE: The Radiology duplicates all have Hospital Numbers from your own Trust.

ACTION: Inform PAS who will merge the records via PAS which will automatically update CRIS. This merge message will also merge any image folders on PACS.

SCENARIO TWO: One (or more) of the Radiology duplicates do not have Hospital Numbers from your own Trust.

ACTION: If one (or more) of the Radiology Duplicates do not have Hospital Numbers from your own Trust it is likely that they were created at another Trust within the Consortium. You will therefore need to raise this via 'The Consortium Radiology System Management User Group' as it will be necessary to co-ordinate any merges or unmerges of records across the Consortium to ensure that you can establish the correct Patient Demographic and Radiology Patient records for each site as well as undertake any re-labelling which may also be required before /after merging.

How to Merge Patient Records

Search for and select the patient you wish to merge with another record. Click on TOOLS > SERVER and 'Merge Patients'.

In the Merge tab enter the details of the patient you want to merge with the first patient.

The screenshot shows the 'Merge' tab in a software interface. At the top, there are input fields for patient details: CRIS No 50, Hospital No 55HSS, NHS No 767 885 0581, Surname VADER, Forenames DARTH, DOB 01/01/1983, Sex MALE, Title MR, Telephone 1166 367264, Age 24 Years, Address 145 WINSTANLEY CRESCENT, RAMSGATE, KENT CT11 7SS, Ward Accident & Emergency/Dr Clooney 11/02/2007, Film Date Unknown, and No. Atts 1/1. Below this is a 'Patient to remove' section with fields for CRIS No 54, Hospital No HSS1245, NHS No, Surname VADER, Forenames DARTH, DOB 03/01/1993, Sex MALE, Title MR, Telephone, Age 14 Years, Address 1 ENNERDALE CLOSE, DRONFIELD WOODHOUSE, DRONFIELD, DERB..., Ward Accident & Emergency/Dr Clooney 07/02/2..., Film Date Unknown, and No. Atts 1/1. At the bottom, there is a 'Hospital Numbers' table with two columns: 'CRIS No 50 (To Keep)' and 'CRIS No 54 (To Remove)'. The 'To Keep' column contains '55HSS' and 'HSS01' with a green checkmark. The 'To Remove' column contains 'HSS1245' and 'HSS01' with a green checkmark. On the right side of the form, there are buttons for 'Merge', 'Clear', and 'Close'.

Decide which Hospital Numbers you wish to retain and view on the Primary Radiology Record by dragging and dropping any required hospital numbers from the CRIS (To Remove) column on the right-hand side to the CRIS (To Keep) column on the left.



Please note: When merging duplicate patients you will be presented with all Hospitals Numbers relevant to the patient throughout the Consortium. Magentus would therefore recommend that you 'keep' all Hospital Numbers as these can always be removed/deleted later if required.

Any hospital numbers left in the CRIS (**To Remove**) column will remain on the original duplicate record but will not be displayed on the Primary Record. It is also possible to permanently delete Hospital numbers by double clicking either number to display a red cross before merging.

Please note: Any PAS updates or orders send to Hospital Numbers left on the original duplicate records will not appear on the Primary CRIS record. It is therefore essential to drag and drop all relevant Hospital Numbers to the CRIS (To Keep) column to ensure future PAS updates including orders where OCS is in use.

Ensure the patient details are correct and select the [**Merge**] function button.

Having merged the patient record the duplicate record will still appear on the patient search but will be highlighted in **grey** to indicate it was once a duplicate record and if loaded will automatically redirect to the Primary Patient record.

A message will be sent to PACS so that relevant image folders are also merged.

CRIS No	<input type="text"/>	Hospital No	<input type="text"/>	NHS No	<input type="text"/>		
Surname	VADER	Forenames	DARTH	DOB	<input type="text"/>	Sex	<input type="text"/>
Title		Telephone		Age		Ward	
Address		Film Loc		Film Date		No. Atts	
File No							

M...	NHSNo	HospNo	CRISNo	Surname	Forenames	DOB	Address	Postcode	Select
1	767 885 0581	55HSS	50	VADER	DARTH	01/01/1983	145 WINSTANLEY CRESCENT,,RAMSGATE,...	CT11 7SS	<input type="button" value="Select"/>
1		HSS1245	54	VADER	DARTH	03/01/1993	1 ENNERDALE CLOSE,DRONFIELD WOOD...	S18 8PL	<input type="button" value="New Patient"/>

How to Unmerge Patients

Click on TOOLS > SERVER and Unmerge Patients. Enter the CRIS Number of the Radiology Record which has been incorrectly merged to another.

CRIS No	50	Hospital No	55HSS	NHS No	767 885 0581		
Surname	VADER	Forenames	DARTH	DOB	01/01/1983	Sex	MALE
Title		Telephone	1166 367264	Age	24 Years	Ward	Accident & Emergency/Dr Clooney 11/02/2007
Address	145 WINSTANLEY CRESCENT,,RAMSGATE,KENT CT11 7SS	Film Loc		Film Date	Unknown	No. Atts	2/2
File No							

M...	HospNo	CRISNo	Surname	Forenames	DOB	Address	Postcode
3	HSS1245	54	VADER	DARTH	03/01/1993	1 ENNERDALE CLOSE,DRONFIELD WOODHOUSE,DRONFIE...	S18 8PL

Select the patient record you wish to unmerge and ensure the patient details are correct and select the [**Unmerge**] function button. This method allows you to see the full demographic details for the duplicate records.



Alternatively, unmerging can be performed via a 'right click' on the patient search screen however this is not recommended as this method does not show details of the merged records via the system logs.

If any requests or attendances have taken place since the Merge it may be necessary to recreate these on the correct record and cancel on the original using the '**Correcting CRIS/PACS Records allocated to the Wrong Patient**' instructions below.

Please note: Neither of these methods of unmerging will send a message to PACS. Studies on PACS will need to be manually updated / amended.

Correcting CRIS/PACS Records - Wrong Patient

In the event a Request, Waiting List Request, Appointment or Attendance is a) incorrectly entered against the wrong patient record on the CRIS System, or b) if a patient record is unmerged or unlinked on CRIS, this will NOT unmerge the studies on PACS, they must be reconciled manually.

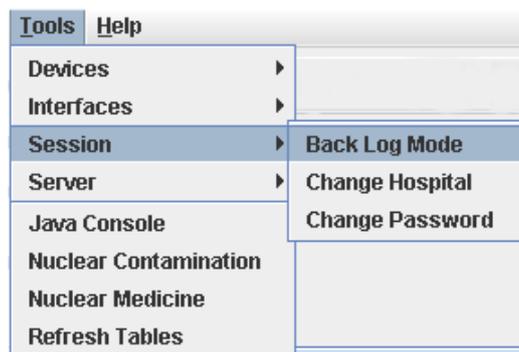
The following procedure is recommended as a replacement for the 'CRIS - MOVE' feature within the Magentus CRIS product.

Please note: These instructions cover the steps required on the CRIS system to recreate the event on the correct patient and cancel of the incorrect attendance on the incorrect patient. However due to the need to make reciprocal amendments via PACS, and the number of PACS vendors with differing workflow / processes please also contact your local PACS vendor in order to confirm the required actions via PACS.

Step One - Re-Entering Details on the Correct Patient Record

Attendances

1. VIA CRIS - First establish the 'Correct Patient' and use BACKLOG mode to re-enter the Attendance using the original date.



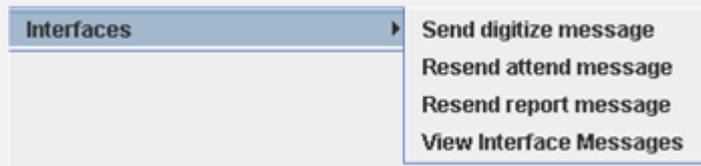
2. Where necessary you should also remember to enter the request date via 'Event Details' > Request Date field for Attendances where the original request was received before this date.

Date Time Request Date

3. If applicable, please refer to CRIS_CRIB_CM_268_CRIS_Document_Scanning.doc for details of how to export and import and scanned images between the two patient records.



Please note: It may also be necessary to 'Resend the Attend' message as this will populate the patient folder in PACS with a new order. This is however only required in a minority of cases as it should take place automatically upon attendance.



4. **Manual reconciliation of studies on PACS** is typically required at this point - please follow local PACS workflow processes for patient correction or contact your PACS provider for guidance.
5. **Via CRIS** - If the Attendance via the 'Wrong Patient' has already been reported 'copy and paste' the report into the destination Patient's 'Attendance Report' ensuring that the correct 'Reported By' Clinician and 'Date Reported' are entered and verify as normal.
6. **Via PACS** - It is sometimes necessary to Merge the old order from the 'Incorrect Patient' into an existing order on PACS - please follow local PACS workflow processes for patient correction or contact your PACS provider for guidance.
7. Now proceed to **Step Two to correct the record on the Wrong Patient.**

Requests, Waiting Requests or Appointments

1. **Via CRIS** - Re-enter the Request, Waiting List Event or Appointment using Backlog mode to reflect the date the request was received, or placed on the waiting list, or when the date the appointment was generated.
2. Where necessary you should also remember to enter the correct 'Request Date' via 'Event Details' for any instances where the original request was received before the date created.



3. If applicable, please refer to CRIS_CRIB_CM_268_Document_Scanning_MAG_V4.0 for details of how to export and import and scanned images between the two patient records.
4. **On PACS** - Confirm that the Order has been created ahead of the patients Attendance.

Step Two - Correcting the Request on the Wrong Patient Record

OCS - If this request originated from an order, Magentus would recommend you re-order the examinations for the correct patient before proceeding.

Attendances

The [**Not Performed**] button function should be used to rectify input errors via **Attended Events** including those that have been reported:



Unreported Attendances

Load the **incorrect event via the 'Wrong Patient' record** and click [**Save**], enter an appropriate 'Status Comment' and click [**Not Performed**].

Reported Attendances

If the report is still **Provisional**, and the result has not been printed / issued to any 3rd party interfaces it can be deleted prior to marking the event as Not Performed.

However **Verified Reports** will require the addition of **An Addendum Report** before verifying the report to ensure that this is sent to PACS to update the original incorrect patient record.



The final step is to **reload the Event** click [**Save**], enter an appropriate '**Status Comment**' and click [**Not Performed**].

Requests, Waiting Requests or Appointments

Via CRIS - Any unattended event can be corrected using the standard 'Cancellation' process. The Request, Waiting Request or Appointment should be cancelled using 'Hospital Cancel - Booking Error' and enter an appropriate 'Status Comment' to explain the circumstances for medico legal / clinical governance purposes.



Via PACS - No further action required.

OCS - If this request originated from an order, Magentus would recommend you re-order the examinations for the correct patient, as the original order has been cancelled on the incorrect patient record.

Correcting Multi Exam orders for a single CRIS Patient

Unlinking Orders

SCENARIO ONE: Two exams have been ordered / requested and have been incorrectly amalgamated into one overall CRIS event, when they should have been kept as two separate events for scheduling and reporting purposes.

ACTION: From the 'Events' list right click and choose Unlink from Order > followed by the relevant examination and say [**OK**] to the resulting message. Having done this click [**Change**] to open the CRIS event and delete the unlinked examination from the event and [**Save**] as normal.

Reload the patient record using [**F9**] and you can now change the unlinked order back into a separate CRIS Event.



Linking Orders

SCENARIO TWO: Two exams have been ordered / requested but have been incorrectly turned into two separate CRIS events, when they should have amalgamated into one overall CRIS event.

ACTION: Open the CRIS event and enter the examination code for the forgotten order and [**Save**] as normal. Reload the patient using [**F9**] and you will then be able to right-click the forgotten order and select the link to event option. You can then press [**F5**] to clear the patient and [**F9**] to reload the patient to display the now amalgamated event on the patient event list.