



MIAP
Managing Information
Across Partners

**Learner Registration Service –
Interpreting Batch File Return Codes
Version 2.0**

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1 Introduction

1.1 Purpose

To give further guidance on what to do with your batch result file and recommended actions to take for a given return code.

1.2 Audience

This document is intended for users of LRS who are involved in the subsequent processing of results files returned by LRS Batch processing.

1.3 Scope

This document is not intended to describe the whole batch processing process. This document only covers guidance on the batch results file and the return codes within the results file.

2 The Batch Load Process

The LRS will accept a collection of ULN Register Records which are submitted during the day as a **batch load file** and processed overnight. How to prepare and submit a batch file to the LRS can be found on the MIAP website – www.miap.gov.uk.

When a successfully submitted batch of ULN Register Records is processed LRS will give three products:

- An updated **Job Details** screen which shows overall what happened to the batch (see Interpreting the Job Details screen).
- An Output **file** which will contain all the ULN Register Records submitted with the addition of a Return Code and optionally a ULN.
- Zero or more exceptions which are added to the **Exceptions list** (see Appendix A Exceptions list).

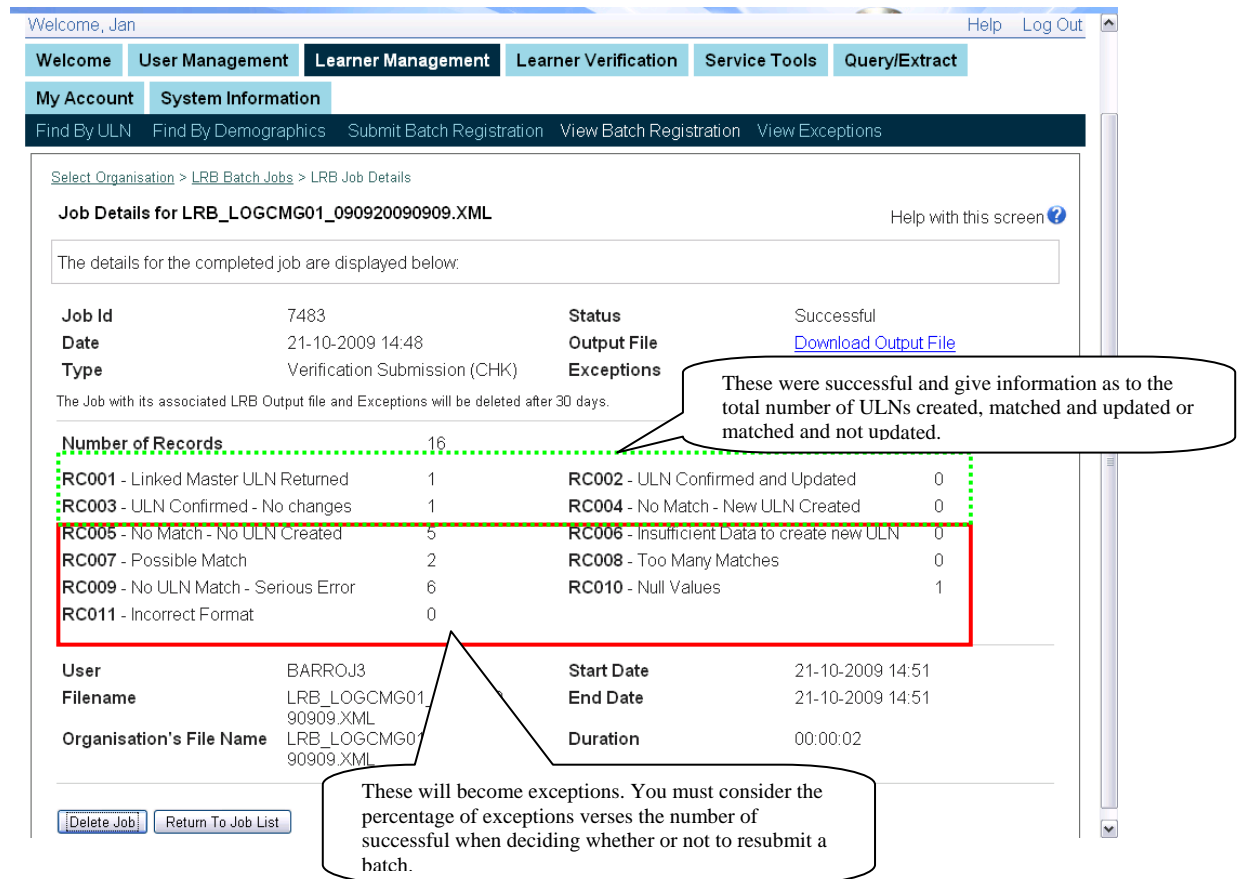
Interpreting results starts when you first review the details of the job submitted.

Key point: You must look at and understand the Job Details information to decide what to do next.

2.1 Interpreting the Job Details Information

The Job Details screen will give you information about how your file was processed and will influence your next course of action. This section explains the totals and different courses of action you can take.

Your Job Details screen will be similar to the one illustrated below and is displayed once you have chosen View Job Details from the LRS Batch Registration Submitted Job List screen:



Job Details for LRB_LOGCMG01_090920090909.XML

The details for the completed job are displayed below:

Job Id	7483	Status	Successful
Date	21-10-2009 14:48	Output File	Download Output File
Type	Verification Submission (CHK)	Exceptions	

The Job with its associated LRB Output file and Exceptions will be deleted after 30 days.

Number of Records	16
RC001 - Linked Master ULN Returned	1
RC002 - ULN Confirmed and Updated	0
RC003 - ULN Confirmed - No changes	1
RC004 - No Match - New ULN Created	0
RC005 - No Match - No ULN Created	5
RC006 - Insufficient Data to create new ULN	0
RC007 - Possible Match	2
RC008 - Too Many Matches	0
RC009 - No ULN Match - Serious Error	6
RC010 - Null Values	1
RC011 - Incorrect Format	0

User	BARROJ3	Start Date	21-10-2009 14:51
Filename	LRB_LOGCMG01_90909.XML	End Date	21-10-2009 14:51
Organisation's File Name	LRB_LOGCMG01_90909.XML	Duration	00:00:02

[Delete Job](#) [Return To Job List](#)

Figure 1 - View of Job Details screen

Total	Count of
No of records	Total number of records submitted in the batch file. The following totals added together will equal this value.
Successful	
RC001 – Linked Master – ULN Returned	Total No of learners where the learner has more than 1 ULN and the master ULN has been returned.
RC002 - ULN Confirmed and Updated	Total No of existing learners already on LRS where ULN has been matched and updated. See 3.3 Resolving Return Codes for more information.
RC003 – ULN Confirmed – No	Total No of existing learners already on

changes	LRS where ULN has been matched and not updated.
RC004 – No Match – New ULN Created	Total No of new learners registered.
Exceptions	
RC006 – Insufficient Data to create new ULN	Total No of learners that have not been registered due to missing information.
RC007 – Possible Match	Total No of learners with up to 10 possible matches in LRS.
RC008 – Too Many Matches	Total No of learners where more than 10 records were matched so results cannot be displayed in Exceptions screen.
RC009 – No ULN Match – Serious Error	Total No of learners where ULN entered could not be found.
RC010 – Null Values	Total No of learners where some of the mandatory information is missing.
RC011 – Incorrect Format	Total No of learners where some of the details are of an invalid or incorrect format.
Applies to Verification Batches Only	
RC005 – No Match – No ULN Created	Total No of learners where a ULN could not be matched or created as the file was submitted in Verification Only mode.

If you add all these totals together it will equal the number of ULN Register Records you sent in your batch load file. (See section 3 for a full explanation of the Return code numbers).

Do you have a high number of Exceptions?

If the exception totals are very high this will show a serious failure in getting ULNs for your learners. This could be due to a significant failure in the format or construction of the learner record data submitted. Download the output file to use to analyse the records which have failed and diagnose the problem. It is recommended that you correct the process which generates the batch load file and resubmit it with the corrections.

No Exceptions?

If the exception totals are zero then Congratulations! You will have no exceptions to process. But beware, normally we would expect to see some level of failure to match, see common sense check.

What should you do with ULNs in the output file?

Download the output file and submit/store the ULNs back into your system.

Common Sense Check

If the successful totals are the largest but the exception totals are not zeros then the file has been processed with some success but you will need to resolve the exceptions.

You have a choice, either to:

- correct the input file and resubmit as a new batch file
- or submit/save the ULNs returned to your system and then address the exceptions online in the LRS portal.

The choice is yours to make, it is likely to depend on the number of exceptions produced.

Key point: It is recommended that if the exceptions generated is less than 10% of the total no of records submitted or less than 100 records then address the exceptions online.

If you choose to put right the input file and resubmit, you will still need to consider the records which have failed and make some changes to the input file (if you do not correct the input file and simply resubmit the batch load file this will not give you any better results).

Whichever path you choose, you need to consider the **Return codes** on the records which have failed to give a ULN (see section 3 Interpreting Return codes).

Key point: Above all use common sense when reading the Job Details screen! If the totals appear to be unusually biased then check that the results are what you expect.

Be careful!

In one batch submitted the Given and Family name were transposed on every record. This led to the successful creation of a new ULN for every record due to this error. The only way you would spot this is because of the totals and by inspecting the results file.

Also it is recommended that you randomly check those successful return codes which have matched on occasion to make sure that the right match is made.

2.2 Addressing Batch Load Exceptions Online

All exceptions from a batch are listed in the **Exceptions list** (see Appendix A for details).

Your ideal goal is to resolve every ULN Register Record on the exceptions list into a ULN (either finding the right ULN or registering for a new ULN).

In order to do this you will generally need to do the following:

- Use LRS Find learner functionality to find the possible ULN records
- Get more information about the learner either by contacting the learner or from your own local information.

Key point: It is recommended that you read [Guidance on Searching and Capturing learners](#) for advice on what to search for and what extra information to get.

Resolving exceptions will need different actions depending on the return codes. The next section explains every possible return code and the recommended actions you should take for that learner record.

In some cases, in resolving an exception, you may identify a problem in the LRS ULN records such as a duplicate ULN, anyone sharing the same ULN, invalid ULN etc.

Key point: Use the [Data Challenge Tool](#) to help resolve ULN problems and raise a Data Challenge if necessary. This can be downloaded from the [MIAP website – www.miap.gov.uk](http://www.miap.gov.uk).

However on some occasions you may not be able to get any further information from the learner to resolve the exception. In this case you must decide whether to register the learner and get a new ULN or abandon the registration of this learner.

Key point: If you have loaded a batch of learners in error or accidentally created new ULNs or matched to the wrong ULN due to a mistake in your batch load file, please contact LRS Help desk for assistance.

3 Interpreting and Resolving Return codes

3.1 What are Return Codes?

A **Return Code** is produced for every learner successfully processed by the LRS via the batch file submission. All Return Codes are status codes, giving information on what happened to the learner's details during processing. Some Return Codes need no action on your part, but others will do. Error and Exception Codes, where the LRS could not process the learner's details, are raised as Exceptions and require your attention to resolve. The details of the codes are listed below.

3.2 Understanding Return Codes...

All successfully processed learners will have an exception code in the range RC001 to RC005 but errors will have an exception code in the range RC006 to RC011. These are used to describe the situations where the LRS could take no automatic action and need your input to resolve, to allow a match or to create a new ULN.

The list of possible codes is as follows:

Code	Description
RC001	Linked Master ULN returned
RC002	ULN Confirmed and Updated
RC003	ULN Confirmed - No changes
RC004	No Match – New ULN Created
RC005	No Match – No ULN Created
RC006	Insufficient Data to create new ULN
RC007	Possible match
RC008	Too Many Matches
RC009	No ULN Match – Serious Error
RC010	Null Values

RC011	Incorrect Format
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3.3 Resolving Return Codes

Please note you can check your updates have been carried out as the output file will contain the new information in the LRS. Please also note that if your batch file supplies a Nationality Code, it will be returned by MIAP in a 3 alpha format only no matter which format you supply it in.

Code	Description	Status	Meaning	Action
RC001	Linked Master ULN returned	Successful	The LRS found an exact ULN record matching the learner supplied. However the LRS has this ULN record merged with another ULN record (known as the Master ULN).	The Master ULN is supplied. Please update your records to reflect the right ULN which should be used. If you believe that the Master ULN record returned is not the right ULN then consider using the Data Challenge Tool to check if the ULN was incorrectly merged.

Code	Description	Status	Meaning	Action
RC002	ULN Confirmed and Updated	Successful	<p>Updates will only occur as follows:</p> <ol style="list-style-type: none"> 1. The five mandatory fields (Given Name, Family Name, Date of Birth, Gender or Last Known postcode), will only be updated if the Verification Type value is set to a value higher than 0 = none provided. 2. If updating Given Name or Family Name, the above applies as well as the name needing to match the database value on a fuzzy or pseudonym name. In reality this could mean only very minor changes to these names will happen. 3. If updating the Address fields the five mandatory fields must match as explained in point 1. An update will be performed if at least 1 of the 4 address fields supplied in the batch file is completed. 	<p>No corrective action needs to be taken for a record with this code but if an update has not taken place as expected, please remember how this works before submitting another attempt.</p>

			<ol style="list-style-type: none"> 4. The Verification fields will be updated as a group with the values in the batch file whether the same as the LRS or not. 5. The batch file field contains a value and the corresponding LRS field is blank. 6. If Ability to Share field has previously been set by the learner then this cannot be reset by any values in the batch file. Similarly, it cannot be updated to "0 = FPN Not Seen" if the field was previously set to one of the "FPN Seen" values. 	
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Code	Description	Status	Meaning	Action
RC003	ULN Confirmed - No changes	Successful	ULN record has been found for the learner. None of the data you supplied has updated the ULN record.	No corrective action needs to be taken for a record with this code. Please update your system to reflect the ULN supplied, if necessary.
RC004	No Match – New ULN Created	Successful	No ULN record was found for the learner and the LRS has given a new ULN and recorded all the details you have supplied.	No corrective action needs to be taken for a record with this code. Please update your own systems/records with new ULN supplied. If you believe that the system should have found a record and not created a ULN consider using the Data Challenge Tool (see Appendix B) to check if the ULN was incorrectly created.
RC005	No Match – No ULN Created	Successful (Verification Only submission)	This code can only occur when a batch load file is submitted in Verification Only mode. This return code is the same as RC004. It indicates that No ULN record was found for the learner but in this case, the LRS does not generate a new ULN for this learner as batch file was uploaded using Verification only mode.	No corrective action needs to be taken for a record with this code. If you wanted to create the ULN for this record then consider resubmitting this file. If you believe the ULN register record should have located then consider searching for the learner online using the portal.

Code	Description	Status	Meaning	Action
RC006	Insufficient Data to create new ULN	Error	<p>The LRS has found no match for the learner record and failed to create a ULN because not all the data needed to register has been supplied.</p> <p>In this case, you have not supplied all of the mandatory fields. You need to check Verification Type and/or Ability to Share are complete.</p>	<p>Check the Verification Type and Ability to Share field have an appropriate code completed as per the LRS Batch Interface Specification. If Verification Type 999 = Other is selected, please ensure that the Verification Description field is complete. This is a free text field. For further information on verification, please refer to the Verification Guidelines available from the MIAP website.</p> <p>For further guidance on the Fair Processing/Privacy Notice for setting the Ability to Share field, please refer to the MIAP Fair Processing / Privacy Notice available from the MIAP website.</p> <p>Once you have corrected your batch file, please resubmit the file to the LRS or consider creating the ULN(s) via the portal.</p> <p>In either case do not forget to delete the Exception record from the exception list once you have resolved the problem.</p>

Code	Description	Status	Meaning	Action
RC007	Possible match	Error	The LRS has found up to 10 possible matches for the learner record when submitted without a ULN.	<p>Go through View Exceptions screen on the LRS portal to see the possible matches found for the learner. Use the partial and full expand options to see more information which will help you decide which, if any, is the learner you are looking for.</p> <p>Please refer to the Searching For Learners guide for more information on refining your search.</p> <p>If you cannot resolve which ULN Register Record is the right one then register the learner for a new ULN.</p> <p>Alternatively you may have identified duplicate records for the same learner. If you suspect a duplicate then use the Data Challenge Tool to resolve the duplication.</p> <p>Once you have obtained a ULN then delete the exception from the exception list and update your own system/records with the ULN.</p>

Code	Description	Status	Meaning	Action
RC008	Too Many Matches	Error	LRS has found more than 10 matches so no possible matches will be returned.	<p>You need to get further information from the learner (or from your own records) to reduce the number of possible matches by including this information in the search.</p> <p>Please refer to the Searching For Learners guide for more information on refining your search.</p> <p>If you cannot get a list of possible matches (RC007s), please contact the LRS Help Desk for assistance.</p>
RC009	No ULN Match – Serious Error	Error	The ULN supplied in your batch file has not been recognised.	<p>Please check that the ULN you entered has 10 digits and that the Given Name, Family Name, Date of Birth, Gender and Postcode match this ULN.</p> <p>Check the ULN does not exist in your system assigned to another learner as well.</p>

Code	Description	Status	Meaning	Action
RC010	Null Values	Error	The LRS was unable to search for a ULN because one or more of the mandatory fields on the learner record supplied is blank.	<p>Check that you have, at least, the following information:</p> <p>If ULN supplied: Given Name and Family Name</p> <p>If ULN not supplied: Given Name, Family Name, Date of Birth, Gender and Postcode.</p> <p>It not, get the extra information needed. Depending on the nature of the problem you may need to consider if the routine which produces your batch load files needs changing.</p> <p>You can either: fill in the missing details and re-submit record(s) in next batch load file, or do a search online (depending on the quantity of records with this return code).</p> <p>Whichever path is chosen remember to delete the exception from the exception list.</p>

Code	Description	Status	Meaning	Action
RC011	Incorrect Format	Error	<p>The learner record submitted in the batch file contains data which does not meet LRS formats. This could be:</p> <ol style="list-style-type: none"> 1. Either the Family Name and/or Given Name are incomplete or contain an invalid name 2. Prohibited text or postcode has been entered into any of the fields. 3. ULN already exists and file is attempting to update Verification Type being updated to 999 = Other and Verification Description field is blank 4. Date of birth value means learner is less than 11 years old or more than 110 years old 5. ULN already exists and Ability to Share is being set back to FPN Not Seen when learner has previously set this field themselves. 	<p>Check your batch file for formatting errors as follows:</p> <ol style="list-style-type: none"> 1. Check that both the Family Name and/or Given Name are complete. Check names in these fields and all other name fields conform to the Valid Names rule in the Batch Interface Specification. 2. Check that these records do not contain any data that conforms to the prohibited postcode and text rules as detailed in the Batch Interface Specification. If identified, please update with learner postcode or if unable to obtain this then use the default postcode ZZ99 9ZZ. If not postcode and you believe it is the text field, you may not be able to create a ULN for this learner, please contact the LRS Help Desk for further guidance.

			<ol style="list-style-type: none"> 6. An update to all five demographic fields would result in a potential duplicate of an existing learner as an exact match has been found in the LRS. 7. the validation rules (eg maximum length) in the MIAP Interface Guide have been exceeded 8. the @ symbol in the e-mail address field may be missing 9. the Nationality Code does not conform to any of the formats in the table in the Batch Interface Specification. 10. the Postcode does not conform to the validation rules 	<ol style="list-style-type: none"> 3. Check that all records where the Verification Type is set to 999 = Other contain data in the Verification Description field. If not, update them. 4. Check Date of Birth – bear in mind that the day and month can be transposed. Update field and resubmit batch or consider creating ULN via portal. 5. Update your system to reflect the status of the Ability to Share field so this error does not occur again and resubmit record if necessary. 6. Perform a Find by Demographic search in the LRS portal to see if learner already exists. If you identify duplicates, please use the Data Challenge Tool to help you resolve this. 7. Check the validation rules regarding to the field size have been broken. 8. Check the validation rules regarding the email address have not been broken.
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				<p>9. Check the Nationality Codes are CDD compliant.</p> <p>10. Check the validation rules regarding the postcode field have not been broken.</p> <p>For steps 7 to 10, you will need to refer to the Batch Interface Specification.</p> <p>Depending on the nature of the problem you may need to consider if the routine which produces your batch load files needs revising.</p> <p>Remember once you have corrected/updated your file ,You can either resubmit the records by including them in next batch load file, or use the Exceptions screens in the LRS portal and work through them individually (this will depend on the quantity of records with this return code).</p> <p>Whichever path is chosen remember to delete the exception from the exception list.</p>
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Appendix A – Exceptions list

The **Exceptions List** gives information on all exceptions produced from the processing of a batch registration job.

An **exception** is produced when a learner record from the uploaded registration batch file cannot be processed. This usually means not enough information was supplied or there are too many similar learners for the LRS to make an automatic decision.

Exceptions usually need your input to resolve. Once resolved, an exception should be deleted from the LRS.

The Exceptions List provides the following information on the learner if supplied in the batch file:

- **ULN;**
- **Given and Family Names;**
- **Date of Birth;**
- **Postcode;**
- **e-Mail** address; and
- **MIS Identifier.**

The Exception List also provides information on the exception itself:

- **Error Code** indicates why the exception has been raised.
- **Error Date** is when the exception was raised; and
- **Expiry Date** is when the LRS will automatically delete the exception.

Appendix B – Data Challenge Tool

This tool is part of the ULN data challenge process. It will help you decide if you have found a duplicate ULN record, a learner sharing another persons ULN, accidental ULN creations etc.

The tool assists an LRB user in asking the right questions and doing the right checks in order to decide if a ULN problem is genuine or not. It asks questions about the person's name, address, date of birth and any siblings in order to decide the right outcome.

It will prompt the LRB user to get extra information and do further searches in the LRS to decide the right answer. Finally the answer may need an action by the LRB user or gives a correctly diagnosed Data Challenge form (in electronic format for emailing) to fill in and send to the LRS Help Desk.

The tool is browser based, runs on your desktop and is available from www.miap.gov.uk



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