REF2021: New REF2 framework

Delivery in 5.14 (February 2019)

This document should be read in conjunction with the "REF2 re-work: 1 REF2 per UoA" mockup.

Overall framework

From 5.14, Pure supports a single REF2 per output per UoA. Once proposed by a single individual, a REF2 is created in each UoA where associated REF1s exist. Where the associated REF1 has no UoA assignment, the REF2 will be created but with no UoA assignment.

Rationale for a single REF2 per UoA, rather than per institution

- If one REF2 per institution, who decides on the selection status (i.e. whether it meets quality / research thresholds – may be different across UoAs)?
- If one REF2 per institution, how to handle different metadata requirements across panels?
- Ultimately, 1 REF2 per institution in Pure, given the expectation that the REF submission system will collect 1 REF2 per UoA, will create an unnecessarily unruly REF2 form, and one where accurate and complete reporting would be **extremely** difficult to achieve

Introduction of 'Attribution status'

Outputs will go through three stages of consideration for REF2021:

- Proposal
- Review / Contribution assessment
- Attribution

The 'Proposal' stage is as per REF2014, that the researcher proposes outputs for REF (or this is done in bulk via the 'REF2: Bulk creation job'), and associated REF2s are created.

The 'Review / Contribution assessment' stage deals with considerations of quality / is it research, and whether a sufficient contribution was made by at least one of the associated REF1s, ultimately getting to an answer as to whether the output is suitable for submission to REF, and therefore whether or not it is to be included in the UoA's pool of outputs.

The 'Attribution' stage deals with considerations of each individual's contribution to that output and whether it is appropriate for the output to be attributed to them in the submission, and would need to adhere to the submission rules of a minimum of 1, maximum of 5, and a total of 2.5 per Cat A FTE.

In an upcoming release (not 5.14), a new 'Attribution status' field will be introduced, with the following statuses:

- Attributed
- Not attributed
- Cannot be attributed (no individuals have been flagged as 'Appropriate to be attributed to this REF1')

Elsewhere in the REF module (e.g. via a summary screen) we should capture:

- Individuals who have >5 outputs attributed to them
- Individuals who have 0 outputs attributed to them
- Where the UoA is 'full' – has sufficient outputs selected for the pool
- Where the UoA is 'done' – has sufficient outputs attributed appropriately to eligible and submitted individuals
- Some sort of graphic would be helpful here to indicate progress towards 'fullness' and 'done-ness'

These summary screen developments are not planned for 5.14 – 5.14 focuses on the delivery of a single REF2 per UoA and updates to the REF2 editor. **However**, as the existing summary screens do not function with this new REF2 framework without significant revisions, we have disabled the existing summary screens in 5.14. Updated screens will be re-introduced in 5.15 that reflect the updated submission requirements. In the interim, tabular views of the REF1 and REF2 editable lists, have been introduced in 5.14 that enable some submission content to be viewed in summary.

Minor updates to the OA Monitoring summary screens have been made to ensure the recently introduced 'UoA of associated REF2' grouping continues to function as expected.

'Additional information' fields

As described in Annex B of the draft Panel criteria, there are 4 separate statement types that are to be captured as 'Additional information'[1]:

- Outputs that include significant material published prior to 1 Jan 2014
- Researcher's contribution to a co-authored / co-produced output
- Information about the research process and/or content
- Factual information about the significance of the output

We have made representations to the REF team to separate out these different 'Additional information' sections into separate fields. If they choose not to deliver this, Pure will simply collate the different sections together when constructing the submission XML (each section separated by a line break).

There are a few reasons why we think separating these sections out into different fields will be helpful:

- Enables more granular reporting and identification of missing content requested by panels
- Enables dynamic population of Researcher's contribution, depending on who the output is attributed to (see below)
  - It is envisioned that re-attribution of outputs will continue right up until the submission deadline – and without any link between researchers and statements about their contribution, there would be a very high risk that statements relating to other co-authors (against whom the output may have previously been attributed) will be submitted.

Updates to the Additional information fields will not be delivered until the final submission guidance is published and therefore won't be delivered in 5.14.

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[1] "Request to double-weight an output" and "Abstract for outputs in languages other than English" are expected to be separate fields already, as per REF2014 submission requirements.

Researcher's contribution to a co-authored / co-produced output

A statement on the researcher's contribution to a co-produced output can be captured against each eligible REF1. Upon attribution to the individual, the contribution field will be populated with the relevant individual's contribution statement (post 5.14 development). This will enable more safe late attribution and re-attributions, giving users confidence that they don't need to re-check that the contribution statement to be returned in the submission relates to the attributed author, as this will be done automatically.

Research Group

For REF2014, if the UoA chose to assign REF2s to Research groups (as per the configuration in UoA editor), the REF2 Research group assignment was taken from the associated REF1. Where a REF1 had more than one Research group assignment, the user could select the REF2 Research group from the REF1's Research group assignments.

On the assumption that REF2 Research group assignments will work the same way as they did for REF2014, this creates some issues as the Research group assignment will need to be as per the attributed REF1 – so may change if the REF2 is re-attributed. We therefore need to update the REF2 Research group functionality to tie it to the attributed REF1 (and if that REF1 has more than 1 Research group assignment, then the ability to select the appropriate RG assignment on the REF2).

For 5.14 the REF2 Research group functionality will be disabled, and will be re-introduced in a future phase of development, following the publication of the submission requirements.

Peer comments

In 5.14, REF2 Peer comments have been moved from individual REF2 records to be held on the single associated Research Output record, to ensure a single location for all Peer comments (i.e. where there are multiple REF2s across UoAs).

These REF2 Peer comments are not be visible on the Research Output record, but on the REF2 record as per the mockup (thereby ensuring appropriate security of the content). Having this single common storage of Peer comments on the Research Output enables:

- Greater transparency of peer comments and grades
- Reduction in duplicated content across REF2s
- Ease of movement across UoAs (see below)

Users will continue to input Peer grades and comments directly on the REF2 (or in bulk via the 'REF2 Peer Comments job'). The only difference is that Peer grades and comments input for the same Output in another UoA will be visible in all associated REF2s. **For all users other than Administrator and REF Administrator, Peer grades and comments for a particular UoA can only be edited in the REF2 against which they were recorded.**
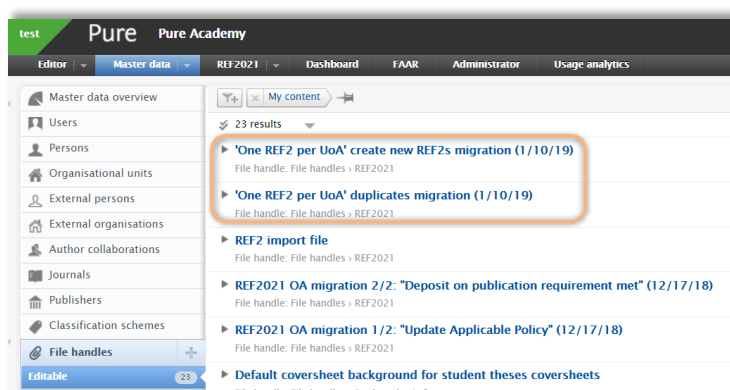
Migration of existing content

Upon upgrade to 5.14, all existing REF2 content will be migrated to the new framework, resulting in the merging of existing REF2s and the creation of new ones, as per the following logic.

Given the nature of this REF2 re-work and the nature of the content being migrated, this is a 'high risk' migration. We therefore strongly urge you to test your 5.14 upgrade in a pre-production environment prior to upgrading your production environment.

You are also strongly encouraged to generate a report on your REF2 content prior to upgrading to 5.14, and immediately following the upgrade, in order to give yourself confidence that all content has migrated as expected. Important fields to report on include:

- REF2 ID
- Research Output Pure ID
- Associated REF1 details
- UoA assignment

All migrations are logged via file handles (accessible via Master data > File handles):

Creation of new REF2 records

Where, prior to upgrade to 5.14, not all of the co-authors (that have an associated REF1 record) of an eligible output proposed it for REF2, during the migration process:

- Where the co-authors are in the same UoA as the original proposer(s), they will be added to the existing REF2 record
- Where the co-authors are not in the same UoA as the original proposer(s), new REF2s will be created in those UoAs
  - These are logged via the 'One REF2 per UoA create new REF2s migration' file handle

Merging of 'duplicate' REF2s

The rules for the migration of existing 'duplicate' REF2s (REF2s in the same UoA relating to the same Research Output) to the new single REF2 are as follows:

- The single REF2 is populated with the most 'advanced' REF selection state (Proposed < Selected for review < Selected for UoA pool of outputs < Not selected for UoA pool of outputs)
- If there are multiple overall predicted grades input, the single REF2 is populated with the highest overall predicted grade
- The single REF2 is populated with the highest 'Total no. of authors override'
- When merging 'duplicate' REF2s, the 'target' REF2 is the 'oldest' REF2 record (in terms of creation date (i.e. lowest Pure ID)) – therefore the Pure ID of the merged REF2 will be that of the 'target' REF2
- The following fields are populated with the 'target' REF2 values:
  - All 'Information to sub-panel' fields (e.g. 'Additional information', double-weighting request, cross-referral requests, etc.)
  - Workflow state

These are logged via the 'One REF2 per UoA duplicates migration' file handle.

	A	B	C	D
1	REF2 ID	UoA		
2	14658270	2		
3	14657754	1		
4	14658264	2		
5	14657238	2		
6	14657748	1		
7	14658258	2		
8	14657742	1		
9	14658252	2		
10	14657226	1		
11	14657736	1		
12	14658246	2		
13	14657730	1		
14	14658240	2		
15	14657790	1		
16	14658300	2		

Tabs: **Migrated REF2s** | Deleted REF2s

	A	B	C
1	REF2 ID	Replaced by REF2 (ID)	
2	14657244	14657238	
3	14657232	14657226	
4	14657220	14657214	
5	14657108	14657102	
6	14657096	14657090	
7	14657120	14657114	
8	14657084	14657078	
9	14657072	14657066	
10	14657060	14657054	
11	14657364	14657358	
12	14657346	14657340	
13	14657382	14657376	
14	14657310	14657304	
15	14657298	14657292	
16	14657280	14657274	

Tabs: Migrated REF2s | **Deleted REF2s**

- The 'Migrated REF2s' sheet lists all existing REF2s that continue to exist post-migration, and their assigned UoA
- The 'Deleted REF2s' sheet lists those 'duplicate' REF2s that have been deleted, with the REF1 associations (and relevant content) merged into the new, single REF2 for the UoA, listed in the 'Replaced by REF2 (ID)' column

Migration of Peer comments and grades

The rules for the migration of existing Peer comments, grades, and names to the associated Research Output record are as follows:

- All Peer comments, grades, and names migrate to the associated Research Output record, with a UoA assigned per peer item, as per the UoA of the original REF2
- No Peer comments, grades, or names are merged together, even if all three fields are an exact match

Movement across UoAs

The behavior when associated REF1a/bs move UoAs is as follows:

One of the co-authors moves UoA (UoA A), to a UoA where the REF2 doesn't already exist (UoA B) (and co-authors remain in UoA A)

- REF1a/b is removed from UoA A REF2
- Pure creates new REF2 in UoA B (note will mean a new Pure ID for that REF2), with REF1a/b attached
- Copy all relevant data (e.g. selection status, allocation data, Info for sub-panel) to new REF2 in UoA B

The author moves UoA (UoA A), to a UoA where the REF2 doesn't already exist (UoA B) (and no co-authors remain in UoA A)

- Only thing that changes is the UoA assignment of the REF2 – record stays exactly as is otherwise

One of the co-authors moves UoA (UoA X), to a new UoA where the REF2 already exists (UoA Y) (and co-authors remain in UoA X)

- REF1a/b is removed from UoA X REF2
- REF1a/b is added to UoA Y REF2
- The only data migrated is as follows – all other data from the UoA X REF2 is not migrated to the UoA Y REF2:
    - Individual attribution status for the REF1a/b
    - Researcher's contribution to co-authored / co-produced output for the REF1a/b

The author moves UoA (UoA X), to a new UoA where the REF2 already exists (UoA Y) (and no co-authors remain in UoA X)

- UoA X REF2 is deleted
- REF1a/b is added to UoA Y REF2
- The only data migrated is as follows – all other data from the UoA X REF2 is not migrated to the UoA Y REF2:
    - Individual attribution status for the REF1a/b
    - Researcher's contribution to co-authored / co-produced output for the REF1a/b

Personal user experience

The Personal user's overall experience does not change significantly. If an output is proposed by another co-author, they will see a label indicating that the output was proposed by another user (not named) (and the text of this message can be edited via text resources).

Upon initial proposal of the output by the single actual proposer, the mandatory proposal fields will be populated as follows for all other co-authors:

- Ranking = Alternate[2]
- Reason for proposing = '-'

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[2] It is acknowledged that giving a ranking of 'Alternate' to outputs proposed by co-authors may not be the most appropriate terminology. If you wish to change this terminology, you can do so via text resources.

The ability for a Personal user to remove a proposed output (whether they proposed it themselves or not) is removed / hidden, so that any one individual cannot remove a REF2 through this means.

Comments

Due to the complexity of re-working the comments functionality to align with the new REF2 framework, and given that very few (if any) institutions used this functionality (as it depends upon Personal users receiving notifications from Pure), we have removed the facility to 'Write a comment to the submitter', and for Personal users to add comments to existing proposals.

Reporting

REF2 reporting has been updated. We have focused our efforts in the new Reporting module, while continuing to enable basic REF2 reporting in the 'classic' module.

Existing report definitions in the 'classic' module that include REF2 content are very likely to no longer generate any content (due to the significant changes to the underlying REF2 datamodel described in this document). You should examine any such reports upon upgrade to 5.14 – you will likely need to re-build these in the new reporting module.

REF2 jobs

All REF2 jobs (e.g. REF2 bulk creation job, Peer comments job) have been updated such that the functionality offered aligns with the new REF2 functionality (e.g. for the REF2 bulk creation job, it is only necessary to include an output once in the import job – all associated REF2s will be created from that single Output ID (so long as there is at least one associated REF1)). Further detail is available in the relevant areas of the REF wiki.

REF OA Compliance status

Given the current guidance that UoAs can submit a maximum of 5% of in-scope outputs that don't meet the policy requirement or do not have an exception applied, Pure does not restrict the selection / attribution process based on REF OA compliance status. Instead, this will be monitored via the REF2 Summary Stats screen (when re-introduced in 5.15).

Deleting REF2s

As REF2 records are automatically created upon initial proposal, the function to delete a REF2 as it currently works (where any user with access to the REF2 record can delete it) would no longer function (as a REF2 would simply be automatically created again).

We have therefore removed the 'delete' function for all users other than Administrator and REF Administrator. **The delete function should ONLY be used when the associated Research Output is to be deleted** (e.g. because it is a duplicate). In which case, all associated REF2s should first be deleted, then the Research Output can be deleted. Otherwise, where the desire is to simply remove a REF2 from consideration from the REF submission, the user should record its selection status as 'Not selected for UoA pool of outputs'.

Notifications / Tasks

We have reviewed the notifications and tasks currently generated for REF2 actions and confirm that they continue to function as expected in light of the updated functionality.

Validation rules

Note that submission validation continues to be implemented on the REF2 form. While the rules applied are still those from REF2014 (and will need to be updated upon publication of the REF2021 validation rules (expected early 2020)), it is expected that many of the rules will remain consistent (e.g. expected format of a DOI, expected number of characters in an ISSN, etc.), and therefore we saw some value in retaining validation. However, users should not get too stuck on any record that appears to be failing validation at this stage as the updated REF2021 rules are still to be applied.