Qualtrics Survey vs Interview Format

This document contains some pertinent descriptions of the survey and interview formats, along with details of where discrepancies affect the merging and therefore the weighting/scoring of solutions via Jupyter Notebook.

# Survey Flow

The survey is broken up into various sections, some of which are compulsory and some which are not. These are described at a top level with the survey flow depicted here, where each is referred to as a ‘Block’:

A screenshot of a computer

Description automatically generated

The ‘Welcome’ block is just a text-based entry- it is not a question, despite what it says. The ‘ID’ block contains all questions required to identify the respondents. The following six question blocks contain questions which are separated out via their respective Attribute Categories (as described [here](https://livemanchesterac.sharepoint.com/:x:/r/sites/UOM-RIT-RLP/Shared%20Documents/New%20RLP/Open,%20Reproducible%20and%20Responsible%20Research/ORR12%20Digital%20Notebooks%20%26%20Sample%20Inventories/02%20Definition/Functional%20Requirements/ELN_Attributes.xlsm?d=we602ba5e81fa4831a31462814116f824&csf=1&web=1&e=3gNqnG) and also separated out visually in the Miro board [here](https://miro.com/app/board/uXjVLdds0oo=/?share_link_id=499238165318)). As can be seen in the Survey Flow, respondents to the survey are only asked to respond to questions in three of the six question blocks – these should be presented ‘evenly’ across all survey respondents, meaning that each block should be displayed the same amount of times.

## A screenshot of a computer Description automatically generated

There are originally 21 Functional Attributes identified for scoring. As part of the survey development process, it was decided that it was more intuitive to have the API functionality appear underneath the ‘Automation’ top-level/Level 1 functional attribute. After discussion, we’ve determined that it is simpler and more proper/rigorous to therefore relegate the ‘API’ functional attribute to below the top-level, and to instead be a feature of ‘Automation’.

# Mismatch in data entry between survey and interviews

## U-03 – Support

Equivalent entries are put in the same row in the table below, for entry options for the survey and interview, respectively.

|  |  |
| --- | --- |
| **Interview Entries** | **Survey Entries** |
| Online documentation | Online vendor documentation |
| User training (online, on site) | Vendor-supplied training |
| Support by provider (Consulting) | Vendor consultation |
|  | In-house consultation |
|  | In-house documentation |
|  | In-house training |

The three ‘In-house’ survey entries options were added for our information only, as a means to gauge how in-demand internal training options are.

## CF-01 (and following) where **sliding scales** are used

* Be sure to exclude N/A values (where the slider hasn’t been touched) when calculating counts
* Do not try to reduce the granularity of the data we have obtained through using the sliding scales by setting ‘greater or less than’ conditions. If mathematically feasible, use the absolute values between 0 and 100 in the weight calculation.

## CF-02

Looking for difference between Default entries. These are populated in the table here, where each row contains equivalent or missing entries.

|  |  |
| --- | --- |
| **Interview Entries** | **Survey Entries** |
| All formats |  |
| Audio formats | Audio formats (.mp3, .wav etc.) () |
| Database formats | Database formats (.rdx, .sql etc.) () |
| Direct only (CF-01) |  |
| Document formats | Document formats (.odt, .pdf etc.) () |
| Image formats | Image formats (.jpg, .svg etc.) () |
| MS Office formats | MS Office formats (.docx, .pptx etc.) () |
| Packed formats | Packed formats (.zip, .eln etc.) () |
| Scientific formats | Scientific formats (.mol, .smi etc.) () |
| Structured formats | Structured formats (.json, .html etc.) () |
| Table formats | Table formats (.csv, .tsv etc.) () |
| Unknown |  |
| Video formats | Video formats (.avi, .mov etc.) () |

## CF-04

Equivalent entries are put in the same row in the table below, for entry options for the survey and interview, respectively.

|  |  |
| --- | --- |
| **Interview Entries** | **Survey Entries** |
| Complete content in document format | All content in a document format |
| Complete content in machine readable format | All content in a structured, machine-readable format |
| Direct publication option | Direct publication option |
| Formats suitable for long term archiving | A subset of content in a structured, machine-readable format |
| Formats suitable for publication | A subset of content in a document format |
| Unknown |  |

## CF-05

Again, equivalent entries are put in the same row in the table below, for entry options for the survey and interview, respectively. Additionally, two interview entries have been combined to become one – see the colour coding below.

|  |  |
| --- | --- |
| **Interview Entries** | **Survey Entries** |
| Define own templates | Definition/import of own templates |
| Import from internet sources | Import from internet sources (i.e. protocols.io) |
| Import of own templates | Definition/import of own templates |
| Microtitre plate templates | Microtitre plate templates |
| Subject specific templates | Other subject-specific templates (please specify) |
| Unknown |  |

## CF-06

Same as for the other attributes – only one entry carries different text, as highlighted below.

|  |  |
| --- | --- |
| **Interview Entries** | **Survey Entries** |
| Advanced/conditional search | Advanced/conditional search |
| BLAST Search | BLAST Search |
| Database queries | Database queries |
| File/data hierarchy | Layered data hierarchy |
| Filtering | Filtering |
| Full text search | Full text search |
| Search by command line | Search by command line |
| Search for reactions by chemical structure | Search for reactions by chemical structure |
| Tagging | Tagging |
| Unknown |  |

## CF-07

There are some slight differences in the CF-07 entries as shown below:

|  |  |
| --- | --- |
| **Interview Entries** | **Survey Entries** |
| Comments | Commenting |
| External guest permitted | External guest access |
| Notifications | Notifications |
| Real-time collaboration | Real-time collaboration |
| Rights management | Rights management (individual or grouped object access control) () |
| Role management | Role management (group privileges) |
| Shared calendar(s)/scheduling | Shared calendar(s)/scheduling |
| Task assignment | Task assignment |
| Unknown |  |

## EF-01

‘LIMS connectivity’ was not used in the survey, and adds no additional information of merit to the ERN database nor interviews, hence JB should remove it from any latest document revisions.

## EF-06

Remove ‘Yes’, ‘No’, ‘Cross-project workflows’ & ‘Project-related workflows’ from the workflow options in the interview response/core functionality database, as these are meaningless to me, given the other options that are available. The additional ‘executable workflow’ given amongst the survey options should be included instead.

## IT-01

* Command-line input needs moving to IT-03
* SDK needs moving to EF-03

# Changes to ERN attributes databases

Beginning 27/01/2025

The alterations suggested in EF-01, EF-06 and IT-01 require careful alteration of alteration of first the [ELN\_Attributes.xlsm](https://livemanchesterac.sharepoint.com/:x:/r/sites/UOM-RIT-RLP/Shared%20Documents/New%20RLP/Open,%20Reproducible%20and%20Responsible%20Research/ORR12%20Digital%20Notebooks%20%26%20Sample%20Inventories/02%20Definition/Functional%20Requirements/ELN_Attributes.xlsm?d=we602ba5e81fa4831a31462814116f824&csf=1&web=1&e=6LiSGy) spreadsheet to then be fed through to the FRsforScoring.xlsx – a link cannot be provided as the version will be changed via Jupyter Notebook functions, although it would sit in the [Functional Requirements](https://livemanchesterac.sharepoint.com/:f:/r/sites/UOM-RIT-RLP/Shared%20Documents/New%20RLP/Open,%20Reproducible%20and%20Responsible%20Research/ORR12%20Digital%20Notebooks%20%26%20Sample%20Inventories/02%20Definition/Functional%20Requirements?csf=1&web=1&e=9b2Me1) folder.

## EF-01

Under the AttributeDefinition tab, the Description/expected content for EF-01 reads:

‘Laboratory management functions can be a helpful extension of the DiNo, but it may also be important to allow existing systems to interoperate with the DiNo if (partial) management, e.g., a chemical database, is already in place. The functions mentioned here are often available as an additional module. 'Materials database' is the broader definition of chemical inventory. 'LIMS Connectivity' is used to define when integrated LIMS software is available, or integrations possible. 'Sample tracking' is used to indicate demand for a sample inventory.’

This definition was clearly corrupted (by JB!) at some point, as identifying demand for an inventory is impossible when applied to descriptions of existing ERNs. This text therefore needs changing. Between the original metadata definition of the ELN Finder team [here](https://livemanchesterac.sharepoint.com/:x:/r/sites/UOM-RIT-RLP/Shared%20Documents/New%20RLP/Open,%20Reproducible%20and%20Responsible%20Research/ORR12%20Digital%20Notebooks%20%26%20Sample%20Inventories/02%20Definition/Functional%20Requirements/MetadataSchemaELNFinderV1_0.xlsx?d=wc3390e20fa8f43a78f5bef19202d47e5&csf=1&web=1&e=o1OBMu) and the one given above, from ‘’Materials database’…’ was added by JB. The latter part of the definition can therefore be updated to:

‘'Materials database' is the broader, more expansive definition of a chemical inventory. 'Sample tracking' indicates a sample inventory feature. 'LIMS Connectivity' is therefore used to indicate when any LIMS software integration is available which doesn’t fall into either of these definitions.’

Thus, ‘LIMS Connectivity’ can remain as part of the top-level ELN\_Attributes document, but should not transfer to the document which captures functional requirements for scoring, which forms the basis of the spreadsheet used to capture functional requirements from the prospective user base via interviews ([Stakeholders\_FRs\_Bens.xlsm](https://livemanchesterac.sharepoint.com/:x:/r/sites/UOM-RIT-RLP/Shared%20Documents/New%20RLP/Open,%20Reproducible%20and%20Responsible%20Research/ORR12%20Digital%20Notebooks%20%26%20Sample%20Inventories/02%20Definition/Functional%20Requirements/Stakeholders_FRs_Bens.xlsm?d=w9d0e97af6a054764832f14b4d0730ed5&csf=1&web=1&e=l4UuFa)). Adapting Jupyter Notebook to account for this.