

Working with related Data

Starting shortly, Please wait!

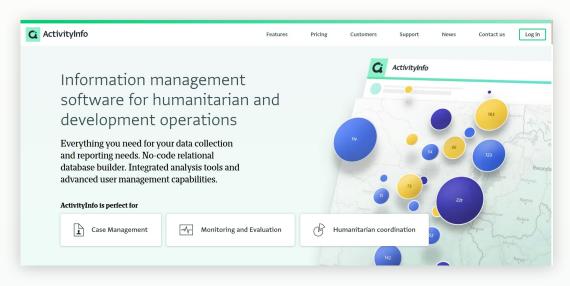


Introductions

Presented by the ActivityInfo Team

All in one information management software for humanitarian and development operations

- Track activities, outcomes
- Beneficiary management
- Surveys
- Work offline/online



Pol

- How do you use ActivityInfo?
 - I design forms and databases
 - o I report data
 - o I analyze data
 - I don't use ActivityInfo yet
- How often do you use Subforms in your data model?
 - Very frequently
 - Occasionally
 - Rarely
 - Never used
- Do you feel you have optimally utilized the reverse reference field in ActivityInfo?
 - o Yes, I have fully utilized it
 - o I have used it to some extent
 - o I haven't explored its full potential yet
 - Not familiar with the reverse reference field

Outline

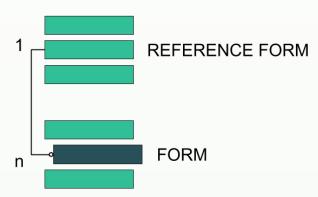
- Subforms versus reference forms: context, common cases and best practices
- Record overviews with Reverse reference fields
- Duplicating reference datasets for quicker database creation

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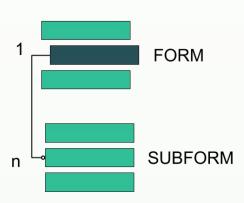
Subforms versus reference forms: context, common cases and best practices

Relationships in ActivityInfo

Reference Forms



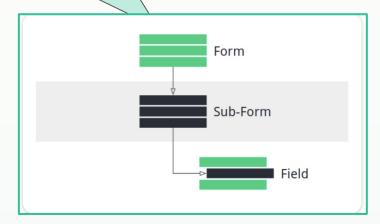
Subforms





Context

In ActivityInfo, a Subform is **a Form within a Form**.



- Subforms are included within a parent Form.
- You can also add a Subform within a Subform.
- You can add up to 30 Subforms in a Form.
 - The maximum Subform depth level is 10.



Context



- A Subform can be used for example to allow you to collect data which needs to monitored over a period of time, or will occur multiple times.
- It can also be used to group different types of information that you need to collect.



Common use cases

- Facilitating the monitoring of relief distribution
- Enabling the documentation of beneficiary encounters during health check visits
- Help log session details for education related programs
- Aid in organizing data related to shelter assessment and construction projects in humanitarian settings
- Facilitating the categorization and prioritization of specific needs in community assessments



Using relevance rules with Subforms

- Relevance rules can be set for Subforms, similar to other fields in a parent form.
- In table view, if a Subform field satisfies the relevance rule, it will be displayed along with the Subform records.
 - If a Subform field does not meet the rule but has existing records, it will remain visible.
 - o If a Subform field does not meet the rule and has no existing records, it will be hidden.
 - Relevance formulas for Subforms can be based on any field type or multiple field types.
- Records of Subforms are not automatically deleted when the Subform becomes irrelevant, but they are marked as invalid.
 - Warnings may appear if a field referenced in a Subform's relevance rule is changed, potentially leading to data or record deletion.
 - You should acknowledge warnings or revert to original values to proceed.
 - A warning may also appear if a Subform field's relevance rule is not met and there are existing records of the Subform.
 You should acknowledge this warning to continue.



Best practices

- Clear and Consistent Structure: Maintain a clear and consistent structure when designing subforms to ensure ease of data entry and interpretation. Remember that subforms allow you collect different kinds of data and this can be confusing if you do not adopt a clear structure for each.
- **Limited Depth and Complexity**: Avoid excessive nesting of subforms or overly complex structures, as this can make data management and analysis challenging. Limit the depth of subforms and prioritize simplicity to enhance user experience and streamline data processing.
- **Purposeful Segmentation**: Utilize subforms to logically segment related data within a main form, focusing on specific themes or categories relevant to the project or activity. Ensure that each subform serves a distinct purpose and contributes to the overall data collection objectives.



Reference forms

Context

- Reference forms are just forms that contain reference data
 - Reference fields are fields that make it possible to connect Forms to other Forms or to the built-in Geographic database of ActivityInfo.
- Reference forms store information known in advance, managed centrally, or needed across various data collection forms.
- Using reference fields avoids generating long single selection fields.
 - A Selection field allows you to create a list of options inside the Form whereas a Reference field references another Form (a 'Reference Form') where each option is another Record.



Reference forms

Using key fields in Reference forms

- You can link your Records to the Records of another Form.
- To link a Record of one Form to a Record of another Form you need to use as common reference:
 - Key fields
 - Serial Number field
- Using a Reference field and multiple Keys in the referenced Form, you can also create a
 'cascading' effect to allow users to select from a series of options.
- Corrections made to the reference table are automatically reflected in forms that reference it.



Reference forms

Reference fields vs selection fields

- Selection fields create lists of options within the Form.
- Reference fields reference another Form (Reference Form) where each option is a separate Record.
- Reference fields provide a way to include extra details or information about each choice in the referenced form.
- Single Selection fields are used for basic lists of options without additional information.
- Reference fields are used when changes may occur in the data and consistent linking is needed across multiple Forms.
- Examples of Single Selection fields include age categories and options for biological sex.
- Examples of Reference fields include partner organizations and lists of institutions/entities.



Subforms versus Reference forms

Subform

Use when:

- you want to create a parent-child relationship between a two records
- related data is dependent on another, in other words, the subrecord would not make sense without being attached to the parent record

Reference forms

Use when:

- data is known in advance and managed centrally
- data is **shared** across multiple forms
- you want to better manage a long list of options
- you need to make updates to the reference data that will be reflected in all forms using the reference
- you want to manage data to be used for categorization of other information e.g. geographic locations



Case study

Reference forms, Subforms, and Relevance rule for subform

• Scenario: Tracking aid delivery to beneficiaries in a crisis intervention

 In a relief distribution project following a natural disaster, a humanitarian organization is tasked with tracking aid delivery to affected households through their head of house.

Analysis requirements

- Organization has a long list of caseworkers, geographical location and partners to be used across multiple forms
- Organization would like to collect details about the HOH, their vulnerability and displacement situation on a monthly basis
- Organization requires a system to differentiate between displaced and extremely vulnerable beneficiaries from those who are not displaced but vulnerable, in order to determine appropriate follow-up actions for efficient monitoring and evaluation of relief efforts.

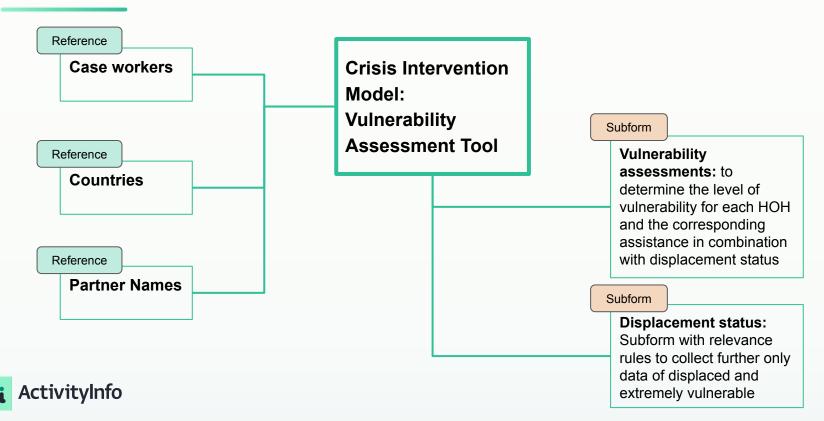
Approach

- Using reference and subforms forms
- Implementing a relevance rule within the data collection system, utilizing specific criteria such as displacement status and vulnerability indicators to categorize beneficiaries accordingly. This rule will enable the automatic differentiation of beneficiaries, facilitating the determination of appropriate follow-up actions based on their level of displacement and vulnerability



Case study

Data model



Demo

Record Overview with Reverse Reference fields

Record overview with reverse reference fields

- To create a Reverse Reference field, you must first have an existing form with a Reference field defined which points to your current form.
- Reference fields which reference other forms cannot be reversed in your current form.

- A reverse reference field allows you to track where form records have been referenced in other forms through a reference field.
- It is not automatically displayed and needs to be deliberately added to a form.
- Using reference field/reverse reference field pairs facilitates greater visibility into the connections that exist between data.



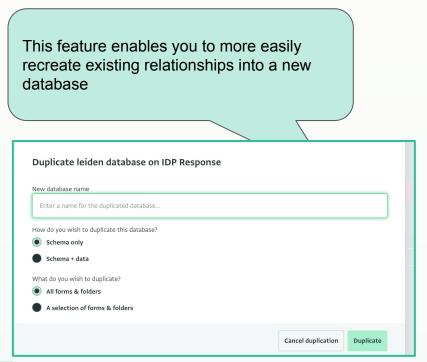
When to use a reverse reference field

- To track and maintain a connection between two forms or sets of data.
- To navigate from one form to another to access related information.
- To enable administrators or users to easily administer and manage data by navigating back from a specific form to its reference form.
- To analyze and report on data relationships and dependencies between forms.
- To ensure visibility, especially when referenced records may be modified or deleted.
- To enhance the overall usability and efficiency of your relational database by providing a seamless way to navigate between related forms.



Duplicating reference datasets for quicker database creation

Duplicating reference datasets for quicker database creation



- Purpose: Duplicating a database allows for faster work and avoids creating forms from scratch. It is useful for creating new reporting databases or for starting a new project phase.
- Users and permissions: When duplicating a database, users and permissions are not automatically duplicated. Users need to be invited separately to the duplicated database.
- Duplicating a single form: If you only need to duplicate a single form, you can export its fields and import them into a new database.



Demo

Q&A

Links to Resources

- Reference forms
- Reverse Reference fields

