CIOC SOFTWARE ROADMAP: THE AGENCY-SITE-SERVICE DATA MODEL

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INTRODUCTION

Today's Idea Session will focus on:

1. Discussion of the current implementation of the Agency-Site-Service model within the CIOC Community Information module, including known limitations

2. Discussion of potential software changes to improve the end-user experience when using this data structure, including dependencies and priorities for users

3. Discussion of the risk of changes and impact (positive and negative) to external systems if changes are made

AGENCY-SITE-SERVICE IN CIOC

Agency-Site-Service is:

- a form of record organization that defines records in terms of their parent Agency and the relationship between that Agency's Sites and Services

- recommended by Alliance of Information & Referral Systems (AIRS)

Current Agency-Site-Service features in CIOC:

- have been added as a set of classification and description fields on top of existing records in the traditional CIOC data structure

- lack some key features, making reorganization and maintenance of records overly cumbersome

- require that users receive significant training

NO SPECIFIC AGENCY-SITE-SERVICE MODE

There is no specific "Agency-Site-Service" mode that automatically optimizes the setup and software behaviour for working in that mode

There is no easy-to-find documentation for how to set the software up to work this way

AGENCY SITE SERVICE MODE REQUIREMENTS

There continue to be strong use-cases for CIOC that support the traditional (non-Agency-Site-Service) data structure and there is no plan to eliminate that as a choice for users

There is a need to mix Agency-Site-Service and traditional structures in the same Membership/Database. Therefore, there must be a default but also an ability to override and create simple single-tier records

There must continue to be a support for the ability to mix records of differing structures. This is key for transitional reasons when converting data, but also to allow for Views that include mixed data sets that are intentionally configured differently

AGENCY-SITE-SERVICE MODE RECOMMENDATIONS

Allow the software to operate in 3 modes:

- **Agency-Site-Service**: All records must conform to Agency-Site-Service structure. New records cannot be created without Agency-Site-Service structural information.

- **Single-Tier**: All Agency-Site-Service features are hidden. Records default to a flat (single-tier) traditional record structure.

- **Mixed-Use / Transitional**: Allow both Agency-Site-Service and Single-Tier records. Use Agency-Site-Service features when appropriate based on the record(s). Default setting mode available on a per-View basis.

DATA ENTRY FORMS ARE NOT STREAMLINED BASED ON RECORD TYPE

Data Entry forms are not optimized to show only relevant fields

- this feature is only available based on the "Record Type" field which is not part of the Agency-Site-Service data model

Showing only fields that are relevant to the current type of record (Agency, Site and or Service/Topic) would streamline the data management process and guide people into best practices

"Required Field" designation needs to be available by type of record; different needs for Agency, Site and Service

NO BUILT-IN ENFORCEMENT/RECOMMENDATIONS FOR GOOD RECORD STRUCTURING PRACTICES

Verification that records are organized in a sensible and structurally-sound way is highly reliant on the use of manually created and run data quality searches

Issues must be manually corrected

There is little feedback on good practices while creating and editing records

LIMITING ALLOWABLE RECORD STRUCTURES

Forcing all records to be Agency, Site, or Service with no combinations would (on average) increase the number of records that must be maintained by 50%-100%

Allowing combinations can save significant staff effort, but also means that staff must understand more about when and how to use combinations, making their job harder

One way to assist people in structuring their records effectively is by only allowing a pre-defined set of acceptable combinations, with names that clarify how to use them

SUGGESTED ALLOWABLE RECORD STRUCTURES

Type of Record	Underlying Type	Approx. % of Records
Agency – Service Site	Agency-Site-Service	50%
Agency – Administrative Site only	Agency-Site	< 1%
Agency – Umbrella Organization only	Agency	< 1%
Site	Site	5%
Service	Service	20%
Single-Service Site *	Site-Service	> 15%
Topic	Topic	<1%
Single-Tier, Transitional, or Custom **	Any/None	5%

* May be somewhat fewer Single-Service Sites if Service variations by Location was allowed

** Single-Tier, Transitional, or Custom type would not be allowed in a strict Agency-Site-Service model.

SPLITTING RECORDS COMPLICATES THE RECORD MAINTENANCE AND FEEDBACK PROCESS

When new records are created to support an Agency-Site-Service Structure...

- The overall number of records in the database increases

- Individual records become less independent from each other, requiring them to be updated as a set

- There may be different people responsible for the content of different records from the same Agency (both for feedback and internal data management)

- If a Service is offered at 20 sites, the person trying to update the record may only understand how the service is delivered at their own location

WHAT ARE SOME IDEAS FOR MAKING MAINTENANCE OF SPLIT RECORDS EASIER?

Allow the organizations to see and provide feedback on the structuring of records (simple visual aids required!)

Make it easier to send records out for update as a set

Provide overview pages showing the relationships between records and their update status (last full update, scheduled review)

Provide information on best practices for balancing the benefits of fewer records with the complexity of asking data managers and organizations to maintain complex record relationships and variations

Any others…?

VARIATIONS ON A SERVICE BASED ON LOCATION

The software currently forces many "Service Location" records (Site/Service combination) to be created because there is no ability to indicate that there is some minor variance in the Service based on the location where it is offered

Some common needs for variation are **Description (90%),** Hours of Operation (81%), Phones (78%), Service Area or Boundaries (77%), and Contacts (60%)

How much variation should be allowed while still calling it the *same service?* This is a trade-off between maintaining less information, and making that maintenance much more complicated.

SEARCHING SERVICES NEEDS SITE INFORMATION

The software currently forces many "Service Location" records (Site/Service combination) to be created to ensure that searching by physical location and mapping of search results is accurate

By automatically including a Service's delivery locations (Sites) when using location-based search options, there will no longer be a need to duplicate this information in the Service record

How do you map a Service in the search results that could have many locations associated with it?

SEARCHING SITE INFO WITH THE SERVICE

Search issues must be addressed first, so that any changes to record structuring don't make it hard to find records. Location fields that need to be brought in from the Site would include:

- Located in Community
- Geopositioning (Latitude & Longitude)
- Include field variations by location? (This gets complicated!)

SEARCHING CHANGES FOR SERVICE @ SITE: WHAT ABOUT SEARCH RESULTS DISPLAY?

How should Services be listed?

- Should Site and Service information be combined in the results, showing the Service once for each Site location where it is offered?

- If listed only once, how should we display fields that vary based on the Site?

How can we clearly map Services with multiple Site locations?

- Do we only include mappings for Sites that met the search criteria?

- If the Service is listed once, what happens when a user tries to map that Service?

Do we need the option to include visual aids helping identify types of records (Site, Service, etc.)?

TOOLS TO REORGANIZE RECORDS

Deciding to split up or clean-up records is a daunting manual task. Ideally there should be tools to make it easy to:

- Remove extraneous information in a record that isn't appropriate for its type (e.g. don't have a Service Description in the Site)

- Split up a record with two components (e.g. Site and Service without having to make a copy and then heavily edit both copies)

STATE OF RECORD DETAILS

We introduced the Related Record Sidebar to begin to integrate related information, but people need to know to turn it on

As records become more and more "split", further integration may be required to make sure that the person viewing the record has a complete and accurate picture of Services in particular

How can we best integrate variations of record information by Site?

WATCH OUT – IMPACT OF CHANGES

Most databases have records that are shared out for other purposes. If those databases aren't prepared for records to be "split", there may be a significant negative impact to sharing partners. Although Agency-Site-Service is an AIRS standard, many – if not most – external users expect service and site information to be together.

Before restructuring records (in particular splitting up Service-Site records), make sure that key data sharing partners are prepared to use records in this way. If in doubt, *assume they are not*!

We expect there to be a long-term need for a simple export type that automatically combines Site and Service data for export to external systems that can't use the Agency-Site-Service format. If this is a requirement for you, let us know!