FASAMS Requirements Document

Consolidate FASAMS versions Part 1, WI 542905

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Dated: 2/24/2022

CONTENTS

GENERAL

VERSION CONTROL

Date	Version	Author(s)	Brief Description of Change
2/24/2022	1.0	Renee Sessions	Initial document creation
4/13/2022	1.1	Renee Sessions	Update requirements
6/7/2022	1.2	Renee Sessions	Update requirements
7/12/2022	1.3	Renee Sessions	Add rebaseline estimate

STAKEHOLDERS

Role	Name
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DCF OITS Project Director	Nathan McPherson
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SUPPORTING DOCUMENTS AND REFERENCES

- DCF enhancement request form:
  https://unite.feisystems.com/collab/FASAMS/_layouts/15/DocIdRedir.aspx?ID=FEIDOC-1387-207613
- Mapping document:
  https://unite.feisystems.com/collab/FASAMS/_layouts/15/DocIdRedir.aspx?ID=FEIDOC-1387-207758

TERMS AND DEFINITIONS

Terms	Description

SCOPE

INITIAL REQUEST & ASSUMPTIONS

Business Statement

DCF requests the consolidation of FASAMS versions into a single database to support SAMH's reporting needs and facilitate data migration into a future system.

Scope Definition

FEI will consolidate the FASAMS versions into a single database and will only support one database after part one and part two of enhancement 542905 are complete.

Due to the large scope of this enhancement, the enhancement will be split into two parts and deployed over two consecutive releases. This enhancement includes the requirements for **Part 1**, encompassing the data migration and increase in field length.

Part 1 Scope:

The following approach is based on SAMH's current method of reporting.

- Use Archive (a.k.a. Snapshot) created for DCF prior to Version13 purge in 2021
- Migrate Archive records and current Version13 records into current Version14 database
    - Archive records to be included that have ServiceEvent dates from 7/1/2018 – 3/31/2021
        - Note: All ServiceEvent parent entities will be included, as required
    - Version13 records to be included that have ServiceEvent dates from 4/1/2021 – 6/30/2021
        - Note: All ServiceEvent parent entities will be included, as required
    - DCF to provide migration logic to convert Archive and Version13 records into Version14
        - Mapping document located here: https://unite.feisystems.com/collab/FASAMS/_layouts/15/DocIdRedir.aspx?ID=FEIDOC-1387-207758
    - Do not de-duplicate any records
    - Provide means of identifying the source of the record:
        - For the Provider data set, prefix the FederalTaxIdentifier with "Migrated V13" or "Migrated Archive"
            - Note: FederalTaxIdentifier field length will be increased to 50 characters.
        - For the ProviderSite entity, prefix the SiteIdentifier with "Migrated V13" or "Migrated Archive"
            - Note: SiteIdentifier field length will be increased to 50 characters.
        - For all other data sets, prefix the SourceRecordIdentifier with "Migrated V13" or "Migrated Archive"
            - Note: SourceRecordIdentifier field length will be increased to 150 characters.
        - Include the migration source in the DataEntitySourceName field.

Assumptions, Constraints, Dependencies

1. This is **Part 1** of a two-part enhancement.
2. Implementing this change will introduce duplicate data into the system.
3. Managing Entities will be able to see migrated records and their SRIs, and they will have the ability to submit updates to migrated records. DCF has approved this as an acceptable risk on 05/05/2022.
4. The mapping documentation to convert Archive and Version13 records into Version14 will need to be finalized to complete data migration.
5. No file submission will ever be processed by the Version 13 job processor in the future.
6. The Jobs and Staging tables will not be migrated from the Archive or Version13 into Version14.
    a. The Version13 Jobs and Submission tables will naturally be eliminated during Part 2 of the enhancement when references to "Version14" are removed from the system.
7. FEI will only include Client/PTE records that are required parent data sets of Service Events.

EXISTING FUNCTIONALITY

There are currently three (3) versions of FASAMS that DCF SAMH staff uses for reporting: Archive (Snapshot), Version 13 database, and Version 14 database.

PROPOSED FUNCTIONALITY

FEI will consolidate records from Archive and Version 13 into current Version 14. In Part 1, only the migration of data will occur. The removal of references to "Version14" in tables, file names, and rules will occur in Part 2. Updates to task services will also occur in Part 2.

INITIAL ESTIMATE/ QUOTE HISTORY

Phase/ Quote Date	TFS Item #(s)	Description	Estimate/ Quote
2/24/2022	542905	Initial Estimate	Extra Large
4/6/2022	542905	Final Estimate	**Final Estimate:** Analysis – 80 Db Dev – 250 App Dev – 150 Test – 150 Acct / Project Management – 20 **Total – 650**
7/12/2022	542905	Rebaseline Estimate	**Final Estimate:** Analysis – 80 Dev – 210 Test – 80 Acct / Project Management – 12 **Total – 382**

REQUIREMENTS

NOTES TO DEVELOPER

The Jobs and Staging tables will not be migrated from the Archive or Version13 into Version14.

If a ProviderClient does not have a ServiceEvent within the specified range, the ProviderClient will not be migrated from the Archive or Version13.

For a detailed list of questions/answers that arose during database development, please refer to the "Development & Testing Notes" section below.

1. MIGRATE SELECT RECORDS FROM ARCHIVE AND VERSION13 INTO VERSION14

Req. ID	Requirement	Ref. ID	Dev	QA
1.0	Migrate the the following records from Archive (a.k.a. Snapshot) and Version13 into the current Version14 database. • Records from Archive:		☐	☐

Req. ID	Requirement	Ref. ID	Dev	QA

	○ Migrate ServiceEvent data when ServiceDate is within date range 7/1/2018 - 3/31/2021
	      ■ Note: All ServiceEvent parent entities will be included, as required
	    ○ Migrate Waitlist data when PlacementDate is within date range 7/1/2018 - 3/31/2021
	    ○ Migrate AcuteCare data when BedUtilization.CensusDate is within date range 7/1/2018 - 3/31/2021
	   • Records from Version13:
	    ○ Migrate ServiceEvent data when ServiceEvent is within date range 4/1/2021 - 6/30/2021
	      ■ Note: All ServiceEvent parent entities will be included, as required
	    ○ Migrate Waitlist data when PlacementDate is within date range 4/1/2021 - 6/30/2021
	    ○ Migrate AcuteCare data when BedUtilization.CensusDate is within date range 4/1/2021 - 6/30/2021
	   • DCF to provide migration logic to convert Archive and Version13 records into Version 14
	    ○ Mapping document located here:
	     https://unite.feisystems.com/collab/FASAMS/_layouts/15/DocIdRedir.aspx?ID=FEIDOC-1387-207758
	   • Do not de-duplicate any records
	   • Provide means of identifying the source of the record:
	    ○ For Provider data set, prefix the FederalTaxIdentifier with "Migrated V13" or "Migrated Archive"
	      ■ Note: FederalTaxIdentifier field length will be increased to 50 characters, per Requirement 2.
	    ○ For ProviderSite entity, prefix the SiteIdentifier with "Migrated V13" or "Migrated Archive"
	      ■ Note: SiteIdentifier field length will be increased to 50 characters.
	    ○ For all other data sets, prefix the SourceRecordIdentifier with "Migrated V13" or "Migrated Archive"
	      ■ Note: SourceRecordIdentifier field length will be increased to 150 characters, per Requirement 2.
	    ○ Also include the migration source in the DataEntitySourceName field.			

2. UPDATE FIELD LENGTHS

Req. ID	Requirement	Ref. ID	Dev	QA

2.0	Update fields lengths as specified below to accommodate identifying text for migrated records.
	  • **FederalTaxIdentifier** – Increase to **50** (from 20)
	   1. ProviderVersion14Module.Provider.FederalTaxIdentifier
	  • **SiteIdentifier** – Increase to **50** (from 20)
	   1. ProviderVersion14Module.ProviderSite.SiteIdentifier
	  • **SourceRecordIdentifier** – Increase to **150** (from 100)
	   1. ClientVersion14Module.ProviderClient.SourceRecordIdentifier
	   2. TreatmentEpisodeVersion14Module.ProviderTreatmentEpisode.SourceRecordIdentifier
	   3. TreatmentEpisodeVersion14Module.Admission.SourceRecordIdentifier
	   4. TreatmentEpisodeVersion14Module.PlacementRecord.SourceRecordIdentifier
			☐	☐

Req. ID	Requirement	Ref. ID	Dev	QA
	5. TreatmentEpisodeVersion14Module.PerformanceOutcomeMeasure.SourceRecord Identifier 6. TreatmentEpisodeVersion14Module.Discharge.SourceRecordIdentifier 7. TreatmentEpisodeVersion14Module.Evaluation.SourceRecordIdentifier 8. TreatmentEpisodeVersion14Module.Diagnosis.SourceRecordIdentifier 9. TreatmentEpisodeVersion14Module.ImmediateDischarge.SourceRecordIdentifier 10. ServiceEventVersion14Module.ServiceEvent.SourceRecordIdentifier 11. WaitingListVersion14Module.WaitingList.SourceRecordIdentifier 12. AcuteCareVersion14Module.BedCapacity.SourceRecordIdentifier 13. SubcontractVersion14Module.Subcontract.SourceRecordIdentifier 14. SubcontractVersion14Module.SubcontractOca.SourceRecordIdentifier 15. SubcontractVersion14Module.SubcontractService.SourceRecordIdentifier			

DEVELOPMENT & TESTING NOTES

The following questions arose during database development. The questions and corresponding answers are here for reference.

1. QUESTIONS & ANSWERS FROM DATABASE DEVELOPMENT PHASE

ID	Description
Q1	Are we migrating staging tables or job tables? What about the StagingSummary table? **Answer**: We only need the data from V13, not the staging or job tables. The Jobs and Staging tables will not be migrated from the Archive or Version13 into Version14.

Q2	The logic from Archive and V13 is based on ServiceEvent, so that means that a client that had a ServiceEvent within that range will get all other parent data sets required to migrate that ServiceEvent.
	
	Answer: Guidance for AcuteCare and Waitlist detailed below.
	
	Migrate the following for AcuteCare:
	• From Archive:
	   o Migrate when BedUtilization.CensusDate is within date range 7/1/2018 - 3/31/2021
	• From Version13:
	   o Migrate when BedUtilization.CensusDate is within date range 4/1/2021 - 6/30/2021
	Migrate the following for Waitlist:
	• From Archive:
	   o Migrate when PlacementDate is within date range 7/1/2018 - 3/31/2021
	• From Version13:
	   o Migrate when PlacementDate is within date range 4/1/2021 - 6/30/2021

Q3	We are migrating ServiceEvent data "for the date range 7/1/2018 through 3/31/2021" based on which ServiceEvent date? **Answer**: It will be based on the ServiceDate field.
Q4	If a ProviderClient does not have a service within the specified range, will the ProviderClient be migrated? **Answer**: No; DCF only needs the Service Events, so if a client has no service events, then we don't need that client.
Q5	Can we just migrate the archive v13 to v14 directly and then the current v13 to v14 (as opposed to using the "TemporaryVersion13" database)?

	Answer: Yes, that was for the client to visualize the process, so let's skip the temp database and go the more direct route.
Q6	Which field are we using as the date filter to migrate the Waitlist data? **Answer**: We will use PlacementDate for WaitingList

Q7	For AcuteCare, we want to use BedUtilization.CensusDate?
	
	Answer: Migrate the following for AcuteCare:
	• From Archive:
	    ○ Migrate when BedUtilization.CensusDate is within date range 7/1/2018 - 3/31/2021
	• From Version13:
	    ○ Migrate when BedUtilization.CensusDate is within date range 4/1/2021 - 6/30/2021

Q8	If a client has 2 admissions and only 1 has ServiceEvent in the specified date range, do we migrate that other admission with its child records? **Answer**: No, the assumption is, we only include Client/PTE records that are required to migrate over Service Events.
Q9	In the mapping doc, when something "doesn't map" will we just leave it NULL? **Answer**: Yes, we'll leave it null (updated in mapping doc).
Q10	There is no SRI in Provider; how will we identify the migrated records? **Answer**: Prefix to the FEIN and increase length of FEIN field to 50 characters
Q11	We will also have to increase the length of the SRI field. **Answer**: We will increase SRI to 150 characters.
Q12	For Subcontract, do I load Outcome and OutputMeasure of Subcontracts that are migrated (migrated because they have a ServiceEvent within date range)? **Answer**: Yes, if Subcontract was required to submit a ServiceEvent, then we want to migrate the entire record including Outcome and OutputMeasure.
Q13	Do I load child records of ProviderClient and Provider that have ServiceEvents (ex: address, phone, etc.)? **Answer**: Yes, if a record was originally required to get a ServiceEvent in, then we want to migrate that full pre-requisite record.
Q14	For Provider data that fits the criteria, we do not load all that provider's ProviderClients? Only those that had a fitting ServiceEvent? **Answer**: Right, we don't need ProviderClients that do not have ServiceEvents for the time period.
Q15	Do we need POM records? **Answer:** We do not need all POMs under a PTE, but we do want to have all POMs under an Admission that has a ServiceEvent pointing at it.
Q16	For ProviderSites, will we only migrate those that have a ServiceEvent and/or Admission/ImmediateDischarge linked to ServiceEvent? **Answer**: Correct. ProviderSites should be included if they are referenced in an Admission/ImmediateDischarge that have child ServiceEvent records.
Q17	Migrate Archive data for the UAT deployment, or just V13? **Answer**: Yes, DCF wants to migrate the data in the Archive to UAT.
Q18	In addition to the SRI prefix, we could populate the DataEntitySouceName fields in the tables specified where the data came from Archive or V13

	Answer: Yes, we should do that as well. [DCF approved in JAD on 6/9/2022.]
Q19	Can we make "Migrated from Archive" at least one character shorter somehow, since this will be used in the DataEntitySourceName too, its limit is 20 characters. This text has 21 characters, I don't really want to change the length of this field as well. Maybe remove "from" from both so Migrated Archive and Migrated V13? **Answer**: Yes, that makes sense.
Q20	TreatmentSettingCode 1100.97 is not mapped and exists in data. **Answer**: TreatmentSettingCode 97 will map to PlacementCode 4 (updated in mapping document).
Q21	Add assumption (roughly) there is a chance MEs could edit old records that get migrated over. **Answer**: Complete: "Managing Entities will be able to see migrated records and their SRIs, and they will have the ability to submit updates to migrated records."
Q22	We have instances where multiple Initial Admissions exists within the same episode, so what do we do with those? Also, we have Transfer Admissions without Initial Admissions. This came up during ETL, too. **Answer**: If a ServiceEvent is pointing at it, include it. Since DCF wants the data as-is, it's okay if there's a TransferAdmission with no InitialAdmission, or an initial admission with multiple episodes.

Q23	See notes below regarding particular Admissions scenarios.
	
	Answer: Migrate all admissions – deleted and active – with ServiceEvents pointing at them.
	1. Scenario: Multiple Initial Admissions
	  • Migrate the earliest Initial Admission as the V14 Admission/PlacementRecord and subsequent V13 admissions as V14 PlacementRecords, then point all SEs to the associated PlacementRecord
	    ○ Order by AdmissionDate
	      ▪ If AdmissionDate is the same, order by EntityUpdatedDateTime
	  • Ex: When there are two Initial Admissions and one is deleted, the non-deleted IA becomes the V14 Admission/Placement Record; the deleted IA becomes a PlacementRecord and all ServiceEvents point at the same entity they pointed at in V13
	    ○ If the deleted IA has an AdmissionDate prior to non-deleted IA, then the PlacementRecord created from the deleted IA gets a StartDate set equal to the AdmissionDate in V14
	      ▪ IA1 with AdmissionDate = 1/1/2021 and is deleted
	      ▪ IA2 with AdmissionDate = 1/5/2021 and is not deleted
	        • IA2 migrates as an Admission with AdmissionDate 1/5/2021 and PlacementRecord with StartDate 1/5/2021
	        • IA1 migrates as a PlacementRecord with StartDate 1/1/2021 and is marked 'Deleted'
	2. Scenario: No Initial Admission, only Transfer(s)
	  • Migrate the earliest, non-deleted Transfer admission as the Admission/PlacementRecord and subsequent admissions as PlacementRecords, then point all SEs to the associated PlacementRecord
	  • Example:
	    ○ TA1 with AdmissionDate = 1/1/2021 and is deleted
	    ○ TA2 with AdmissionDate = 1/5/2021 and is not deleted
	      ▪ TA2 migrates as an Admission with AdmissionDate 1/5/2021 and PlacementRecord with StartDate 1/5/2021
	      ▪ TA1 migrates as a PlacementRecord with StartDate 1/1/2021 and is marked 'Deleted'
	    ○ Note: If all records marked 'Deleted' then records are inserted in the order of their AdmissionDate
	
	3. Scenario: Non-deleted Discharge

	- If Initial Admission or Transfer Admission has a Discharge, then DischargeDate is migrated to PlacementRecord EndDate - PlacementOutcomeCode migrated based on DischargeReasonCode mapping - Final Discharge should be migrated to a V14 Discharge and all PlacementRecord EndDates not populated - For all PlacementRecords with no PlacementOutcomeCode, populate PlacementOutcomeCode based on DischargeReasonCode mapping 4. Scenario: Admission with deleted and non-deleted Discharges - Do not migrate any deleted Discharges - Anything linked to a deleted Discharge will not be migrated - Ex: A deleted Transfer Discharge will not be migrated 5. Scenario: Evaluations/POMs/Diagnoses associated with Transfer Discharges - Migrate and point at Admission - Ex: All non-deleted Evaluations/POMs/Diagnoses to be migrated and pointed at the V14 Admission or the V14 Discharge
Q24	There are instances when there are multiple TransferDischarges for the same Admission in Archive data. Per current logic, the TransferDischarge updates PlacementRecord, so just have the most recently submitted update the record? **Answer**: Yes.
Q25	The Admissions migration scenarios state, "An Admission with a deleted Transfer Discharge will not be migrated" – so if we have an admission that only has a deleted discharge we will not migrate? **Answer**: Correct, if an admission only has a deleted discharge, then it is basically an open admission (i.e., admission will be migrated just the deleted discharge won't have any affect).
Q26	The V14 Health table has more columns (ex: ActualDeliveryDate, BirthOutcomeCode, etc.) than the source database (POM). **Answer**: Some fields used to be captured in the DischargeEntity in Version13 (for ex: ActualDeliveryDate). They were later moved to the POM.Health entity, so we determined that the most logical mapping would be to populate those fields in the POM.Health entity if a discharge exists in Version13. We would not map a discharge field to an Admission.POM.Health entity because doing so would include information on a field prior to when it was actually submitted. If discharge exists, we will only add these fields to the Discharge.POM because that is how they were submitted. Added the note above in mapping document for the relevant fields
Q27	The Contract module is not included in the mapping. **Answer**: We don't have to do anything for contract just drop the ContractModule.ContractOutcomeMeasure, ContractModule.ContractOutputMeasure and ContractModule.ContractTarget tables and rename the V14 versions. (We will not do that as part of the migration only work since the table name changes will happen later.)
Q28	Are any TEDS changes included as part of the migration (Part 1)? **Answer**: No, these records will naturally be excluded from TEDS because all the EntityUpdatedTImestamps will be in the past.
Q29	What would happen if they do edit a migrated file; regenerate a composite key? **Answer**: I would think the same application code would execute as anything else so the composite key would be regenerated. Implication: Possible collision with already existing duplicate record so possibility of the record erroring. I don't think it's needed to prevent edits.

ARE PAMPHLET UPDATE REQUIRED? YES ☐   NO ☒

Update ID	Pamphlet Chapter/Sections requiring change	Completed by FEI	Approved by DCF
		☐	☐