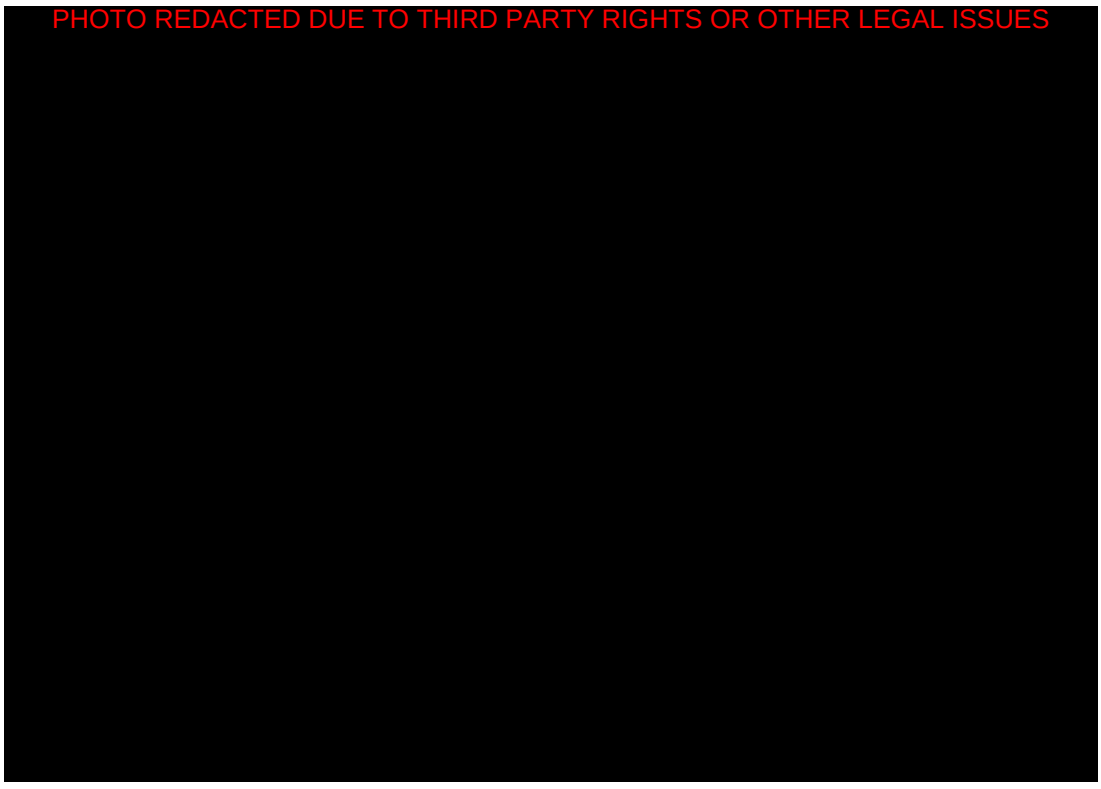
E-enablement of the Common Assessment Framework

eCAF Logical Data Model

Version 1.0



Every Child Matters
Change For Children

Document Control

Revision History

Issue date	Version	Summary of Changes
08/06/2006	1.0	Initial publication

Purpose of this Document

This document is the Logical Data Model for the e-enablement of the Common Assessment Framework (CAF). Its purpose is to define the data items (entities and relationships) involved in the CAF.

A “logical” data model defines these concepts and their structure in detail, but stops short of detailed “physical” representation for a particular Database Management System.

The logical data model will provide a basis for development of a local eCAF databases. It is also the basis for further XML definitions.

Further description of this document is given in Section 2.1.

Contents

1. eCAF Documentation Reader's Guide

A number of documents define the requirements of the e-enabled Common Assessment Framework (*eCAF*). The diagram below gives an overview of these documents and their relationship to each other. Notes below the diagram describe the purpose of each document.

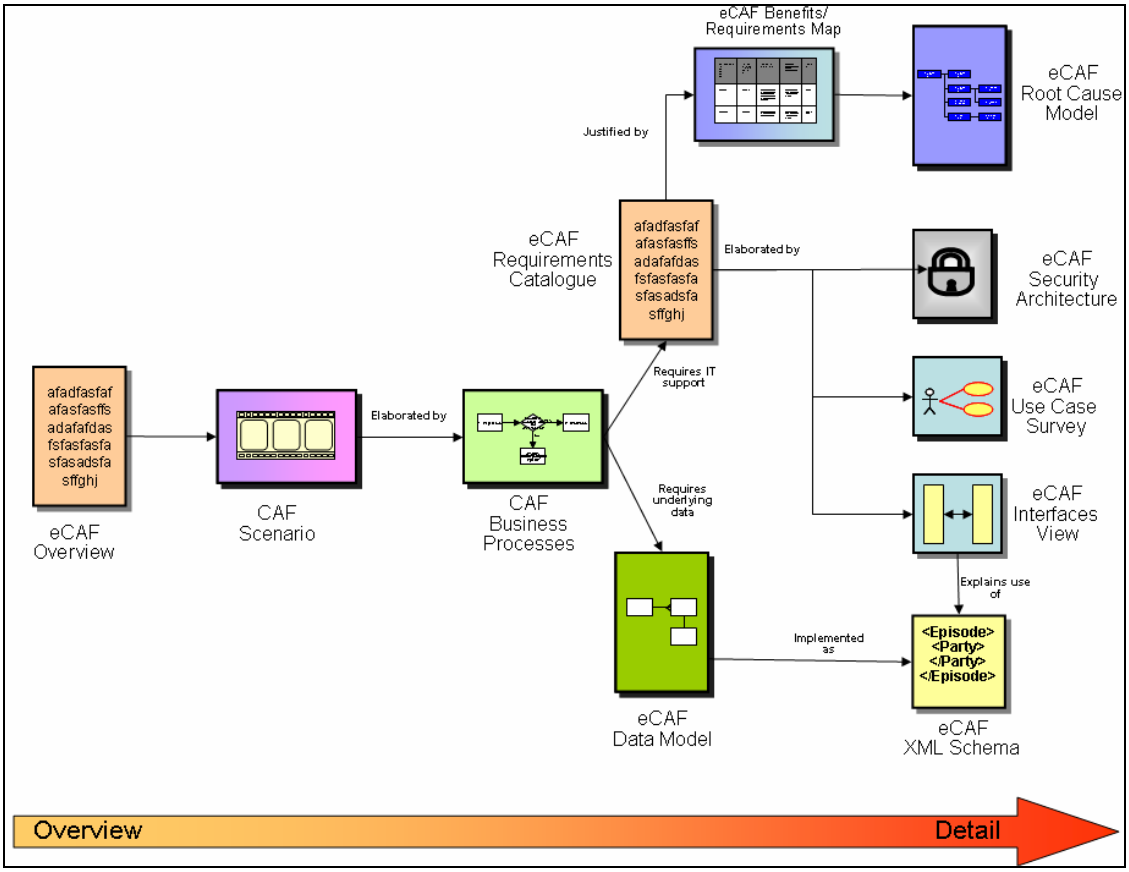


Figure 1 – eCAF Document Route Map

The eCAF document set comprises:

- **eCAF Overview –** Essential starting point and executive summary. Introduces the other documents in the set.
- **The CAF Scenario –** This document walks through a "story", showing an example of how the CAF Business Processes might work in practice. Useful for all readers, to gain a basic familiarity with CAF process.
- **The CAF Business Processes –** This document describes the people and business activities that are required to complete a Common Assessment and the subsequent actions arising out of that Assessment. It also indicates where IT support from an eCAF system will assist these activities.

- **The Requirements Catalogue –** This document defines what system support is required by practitioners using the Common Assessment Framework (CAF). It contains categorised listings of functional and non-functional requirements.
- **The Security Architecture –** This document defines in more detail the security requirements for an eCAF system. This is a critical aspect, and thus worthy of specific consideration.
- **The Use Case Survey –** This document presents the requirements as Unified Modelling Language (UML) Use Case diagrams. This may be useful for more technical readers, for example to inform the Inception and Elaboration stages of a Rational Unified Process (RUP) development project.
- **The Interfaces View –** This document provides more information about the interfacing requirements for an eCAF system. Interfacing is important but potentially complex, so this document provides additional guidance.
- **The Data Model –** This document contains a high-level diagram of the information that will be required in the context of CAF. It provides a more detailed view of information requirements in the form of an Entity Relationship Diagram that defines the essential eCAF data items and their relationships. It also includes a set of Data Classifications which summarise the types of data used in CAF, such as Name and Contact Details. It provides standard names and definitions that will be used by an eCAF system.
- **The XML Schema –** This is a technical schema specification (plus example xml file), providing a standard representation of the Data Model as an XML (GovTalk) message. XML is a widely accepted data format used for information exchange between systems.
- **The Root Cause Model –** This document describes the root causes of the main issues which prevent the delivery of the targeted outcomes of the 'Every Child Matters: Change for Children' Programme (relevant to initial assessments). It states both the business challenges faced (the issues and their root causes) and the business need to be addressed.
- **The Benefits/Requirements Map –** This document provides the linkage between the root causes eCAF looks to address and the solution components (requirements) designed to address them.

2. Introduction and Background

2.1 Document Objectives

This document is the Logical Data Model for eCAF.

A Data Model defines the “static” or “structural” view of the system. It identifies the main data items (entities), their attributes, and the relationships between them. These are expressed in terms of an Entity-Relationship diagram, along with detailed data classifications to explain what each item means.

The model is “logical” because it focuses on concepts and structures, while avoiding specific implementation details. Further work will be needed to create a “physical” data model that is optimised towards a specific database platform. Further work has been done to create XML schemas for information exchange between systems – and the Logical Data Model to provides a basis for this.

2.2 Structure of the Document

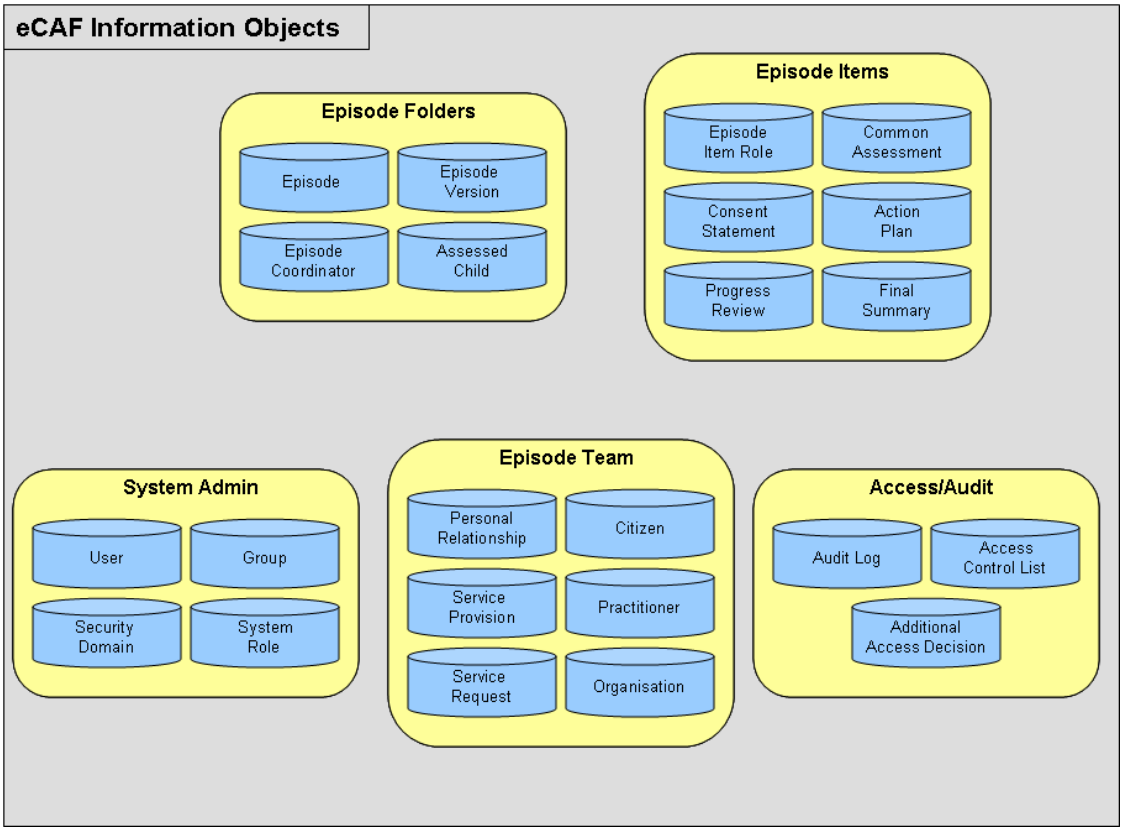
After these introductory sections, then Section 3 contains Entity Relationship diagrams. These are explained in Section 4, which provides data classifications for each part of the data model. Section 4 is subdivided into the following major topic areas:

- Episode Folders
- Episode Team
- Episode Items
- Access and Audit
- System Administration

Finally, Section 5 provides a reference list of the data types used.

2.3 Data Model overview

This section provides an overview of the model. The diagram below shows a summary of the main data items:



A brief summary of each area is as follows:

2.3.1 Episode Folders

The Episode Folders area contains the Episode "folders" of assessment information about a child. It includes basic information on the Assessed Child (name, address, etc), and the history of all previous versions of each Episode. Associated with each Episode is an Episode Coordinator who is responsible for managing the Episode information and coordinating activities.

2.3.2 Episode Items

Each Episode can have any number of Episode Items within it. These can be thought of as loose-leaf "sheets" within the folder, and include:

- Common Assessment
- Consent Statement
- Action Plan

- Progress Review
- Final Summary

Each Episode Item also has roles associated with it recording, for example, the author and other contributors.

2.3.3 Episode Team

The Episode Team represents the “team around the child”, and includes Practitioners, Organisations (eg agencies and teams) and other Citizens (parents, siblings). These are linked to the child through relationships – either Personal Relationships (family members, carers) or Service Provisions. Service Requests can also be recorded – these are Service Provisions which are requested but not yet confirmed.

2.3.4 Access / Audit

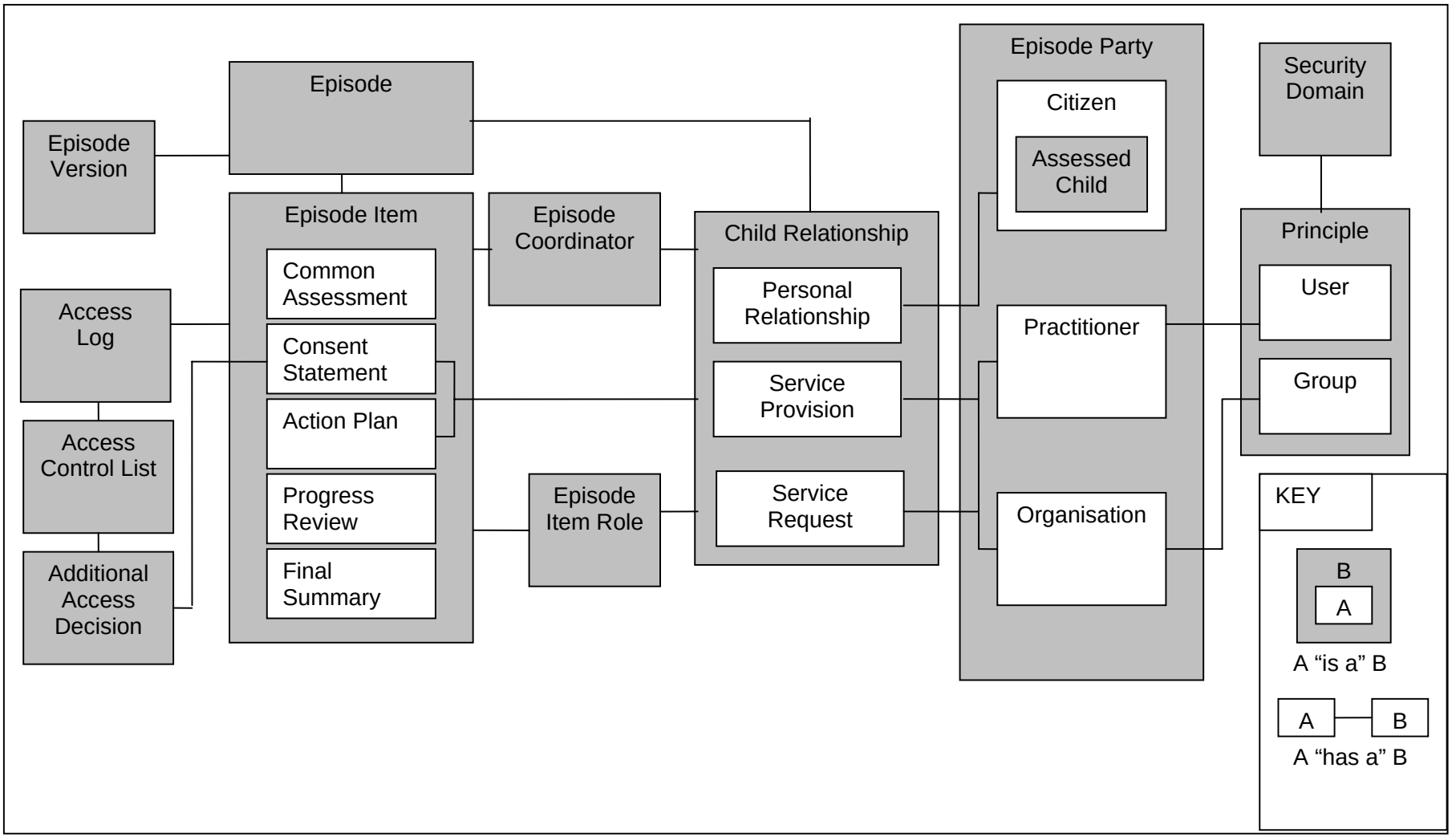
Security is based around the Episode, with individuals and groups being granted access via an Access Control List. Most access will be based on the consent of the child/family, but exceptional access can also be granted and controlled via an Additional Access Decision. The Audit Log keeps comprehensive audit trails of all activity on an Episode.

2.3.5 System Administration

The System Administration area allows for storage of practical information about users and groups, system roles (eg practitioner, administrator, reporting user), and the Security Domains that these users belong to.

2.3.6 Relationships

The diagram on the next page shows some of the major relationships between data items in the model. It demonstrates, for example, how Episode Items belong to an Episode, the linking of access control to the Episode, and the organisation of the Episode Team – including its use to fulfil roles on the Episode and Episode Items. This is described in more detail in the remainder of the document.


Episode
Episode Version
Episode Item
Common Assessment
Consent Statement
Action Plan
Progress Review
Final Summary
Episode Coordinator
Episode Item Role
Child Relationship
Personal Relationship
Service Provision
Service Request
Episode Party
Citizen
Assessed Child
Practitioner
Organisation
Security Domain
Principle
User
Group
Access Log
Access Control List
Additional Access Decision
KEY
B
A
A "is a" B
A
B
A "has a" B

3. Entity-Relationship Diagrams

The diagrams in this section show the logical entities and relationships comprising the eCAF data model.

3.1 Explanation of Notation

An Entity-Relationship diagram is a well know standard format for representing a data model.

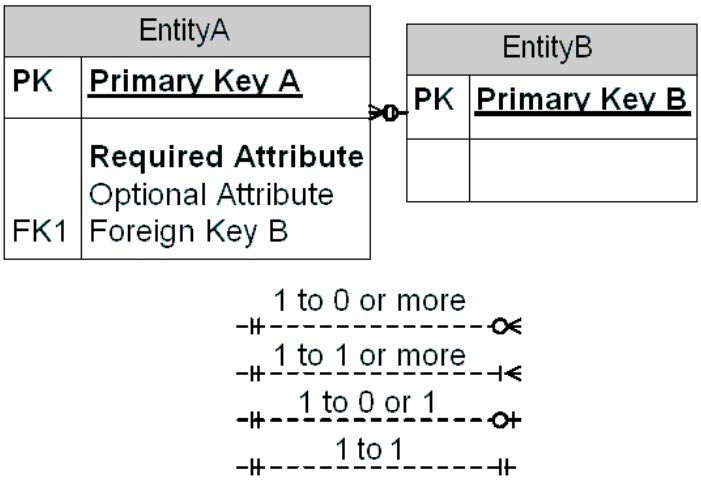
The main “things” (entities) are shown as boxes.

The data items (attributes) are listed inside the box. Each entity has an essential attribute, or attributes, that uniquely identify it to the system. These are known as the Primary Key, and are highlighted by being displayed in a special section at the top of the box. The initials “PK” in the left-hand margin also indicate this. An attribute may act as a Foreign Key that “points” to another entity. The initials “FK” in the left-hand margin indicate this.

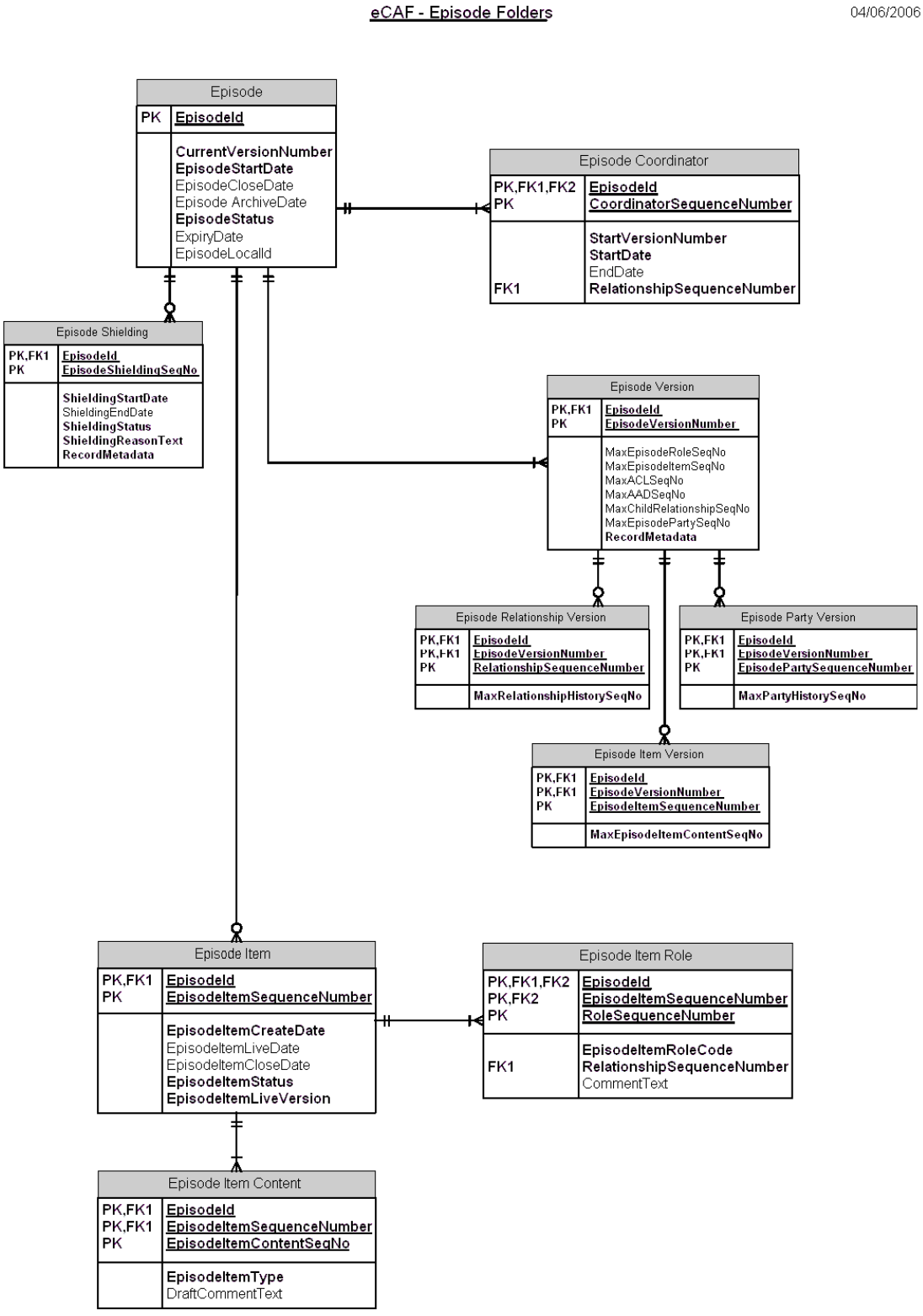
Links (relationships) between the entities are shown as lines. A solid line indicates “ownership”, while a dotted line indicates “association”. The line ending indicates the cardinality of the relationship.

These points are illustrated by the following diagram:

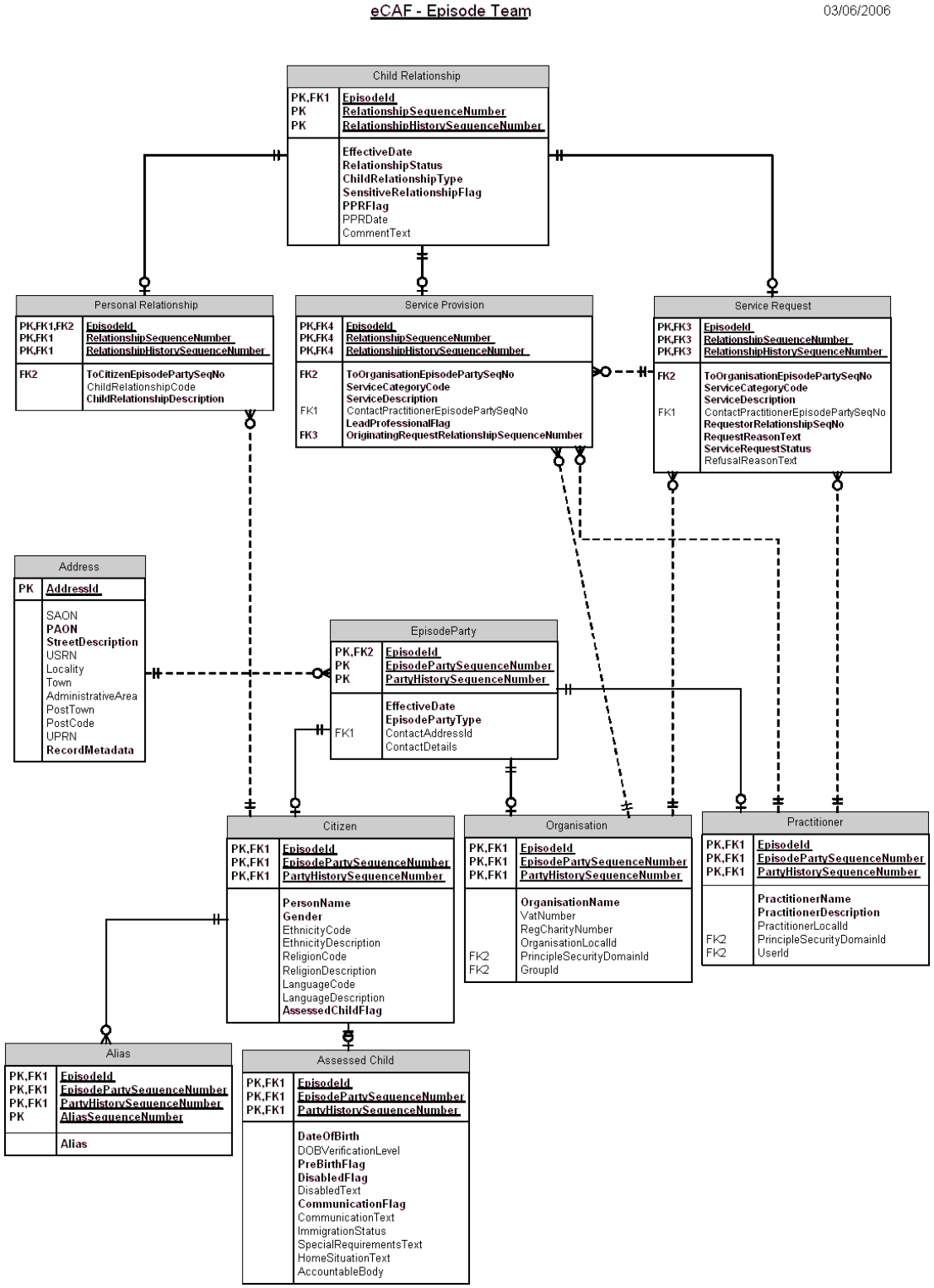
Entity-Relationship Diagram Key



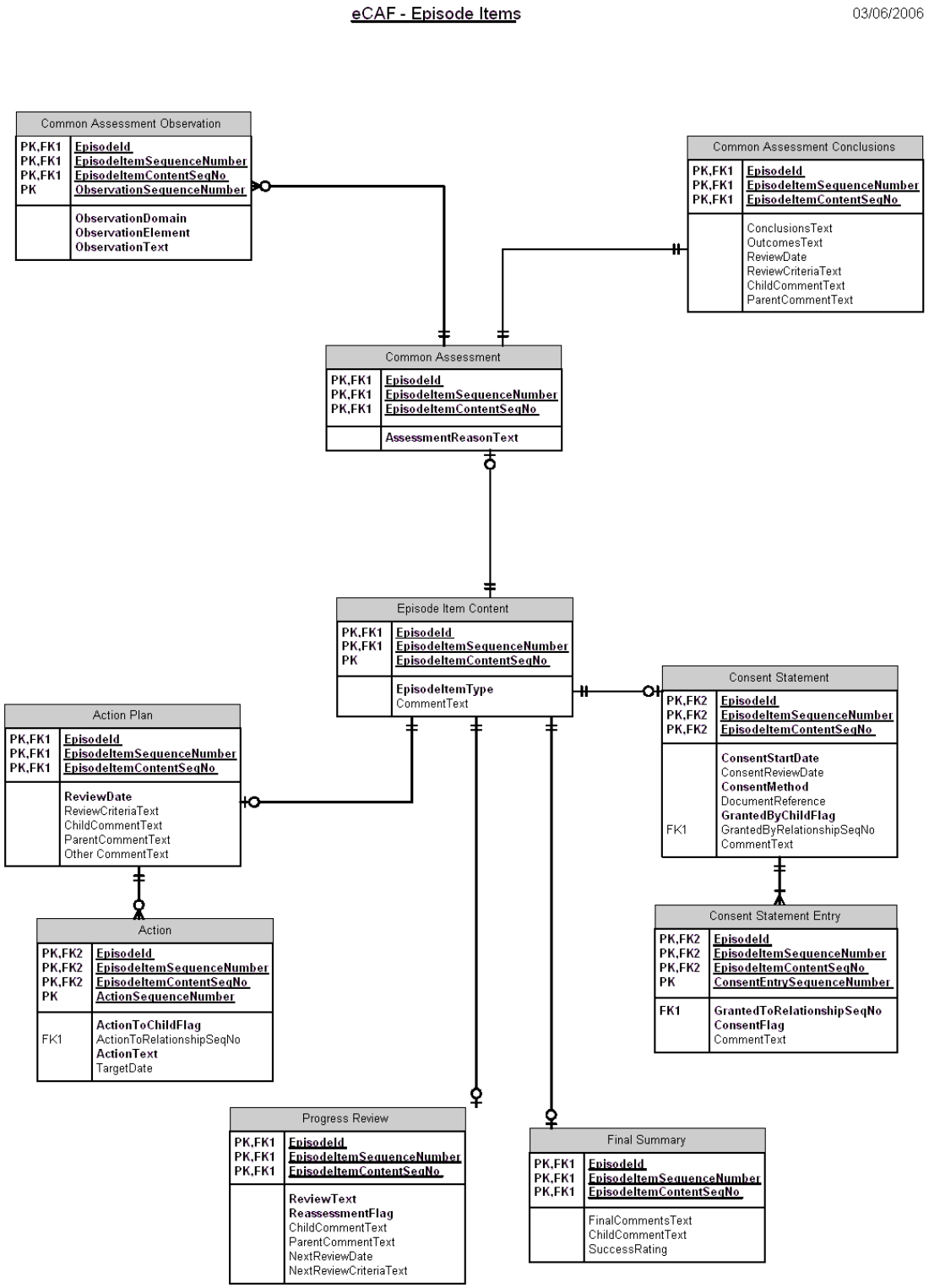
3.2 EpisodeFolders



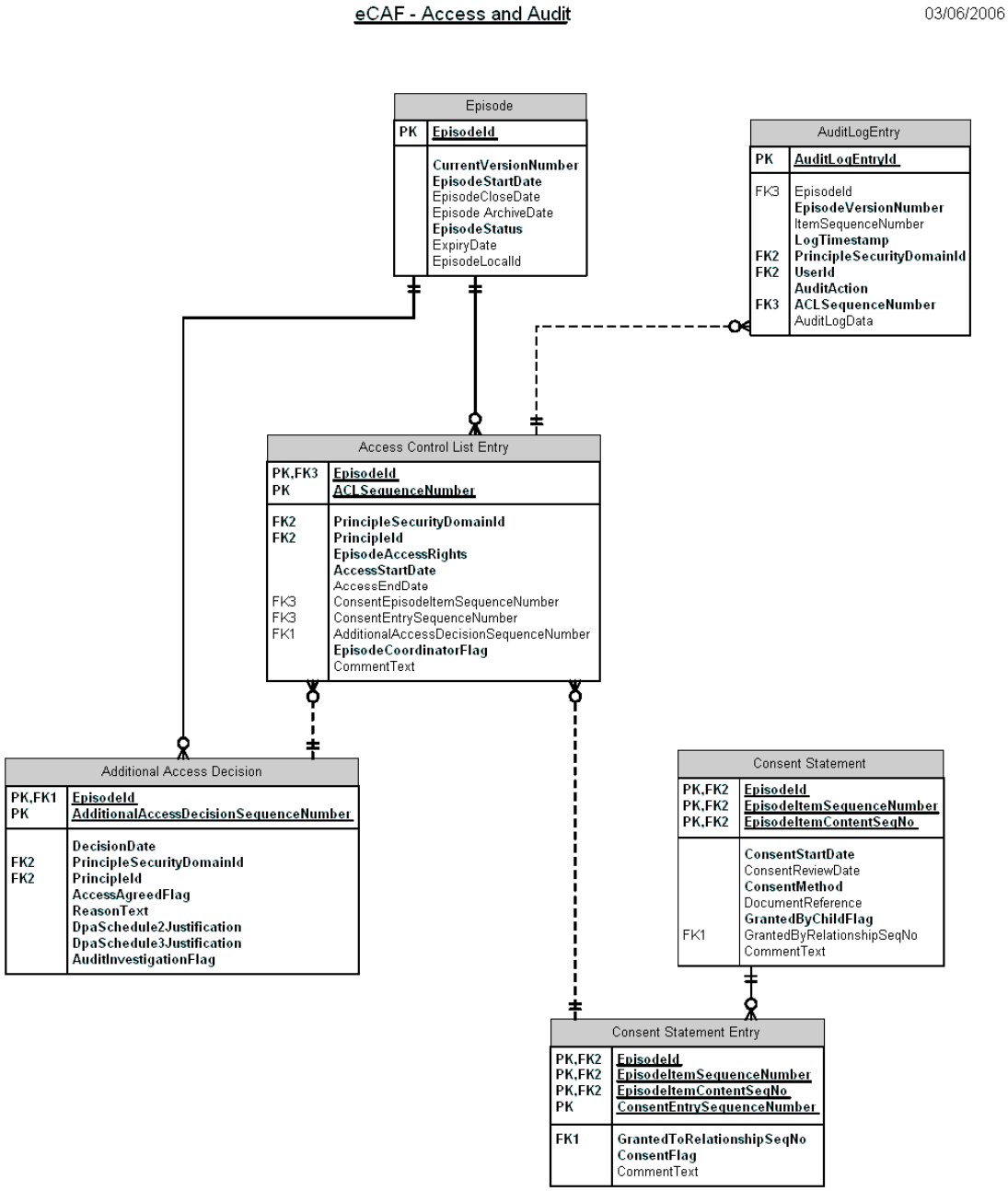
3.3 Episode Team



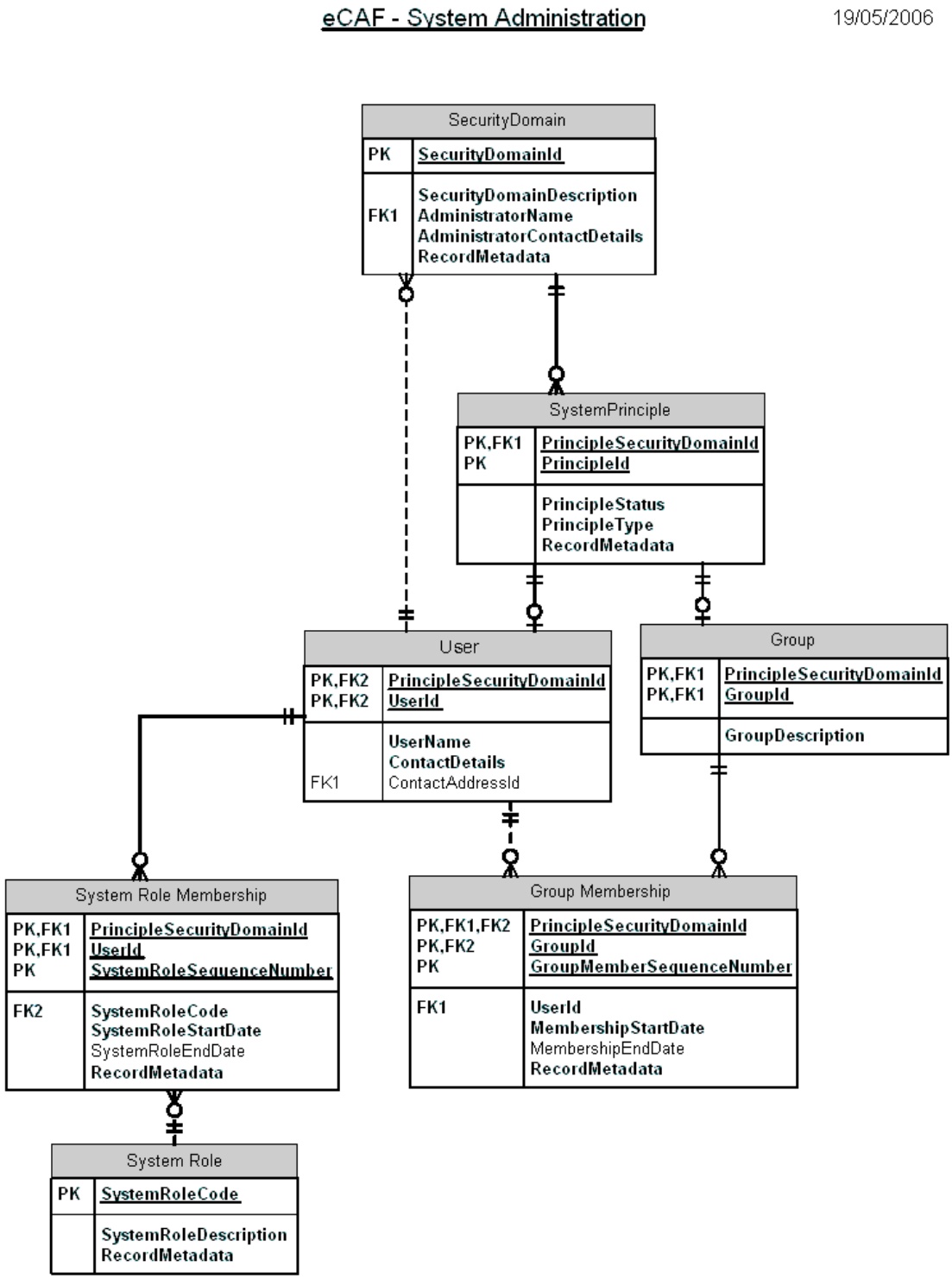
3.4 Episode Items



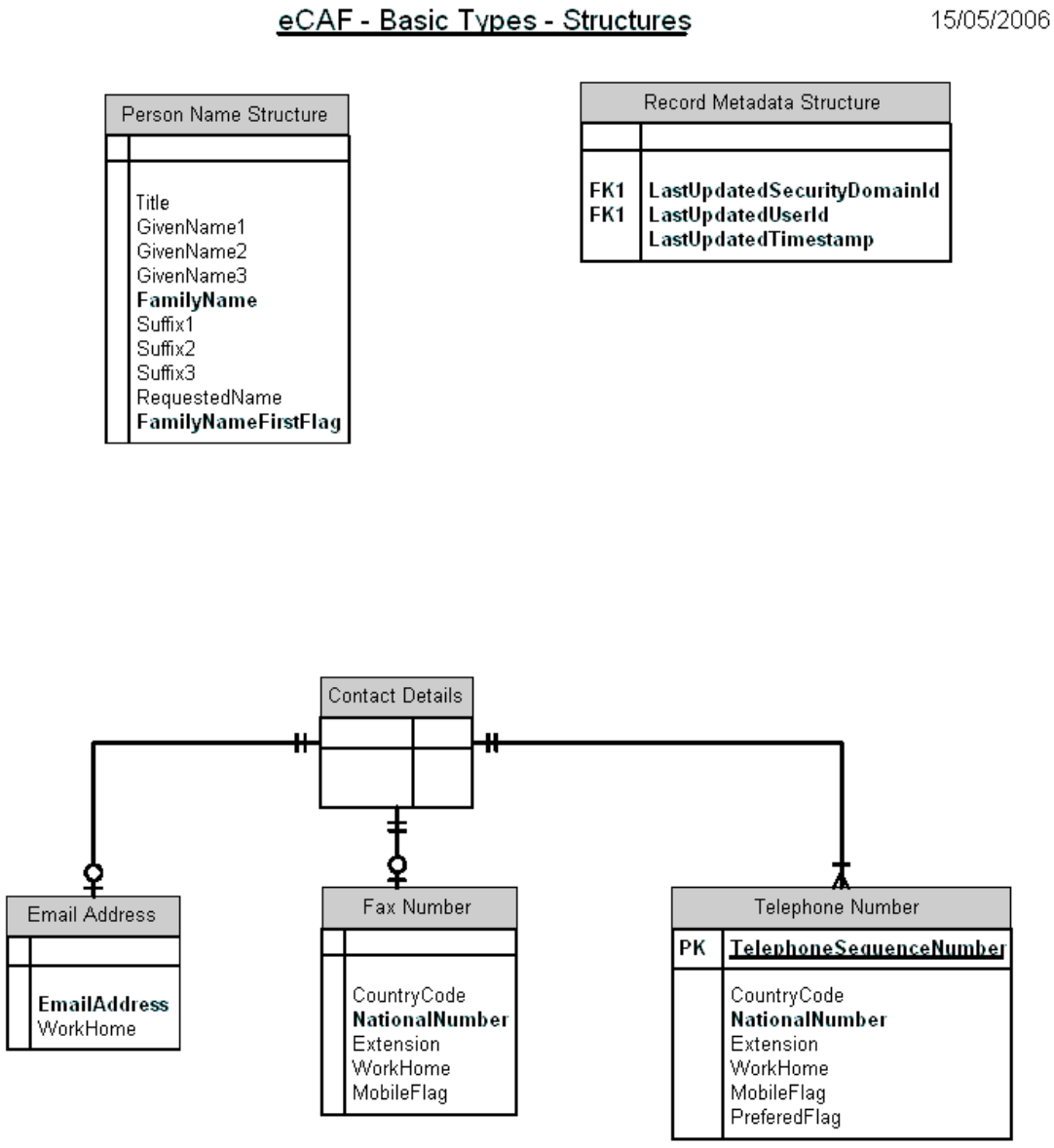
3.5 Access and Audit



3.6 System Administration



3.7 Basic Structures



4. Entity Definitions

This section explains in detail the meaning of each of the entities and data items.

First, each entity is briefly defined.

Then, the relationships between this and other entities in the model are explored..

Finally, the attributes of each entity are listed. Each data item is briefly explained and an indication given of whether it is mandatory or optional or a primary key. An indication is also given of whether this is an external data item that is intended for exchange between systems, or whether it is a purely an internal field for local use.

4.1 Episode Folders

The Episode Folders area of the model provides the core structure for the Common Assessment Framework.

It is based around the concept of an “Episode”, which links together related “items” (such as assessments, action plans), along with basic information about the child, and contact details for family members and practitioners.

A good metaphor for the Episode is a “folder”, containing various sheets of paper relating to an incident in the life of the child. Just like a physical folder, the Episode is completely self-contained and may be passed around between practitioners and systems as necessary.

The Episode provides an infrastructure for audit and access control, and the over-arching flexible structure into which the detailed information can be fitted.

4.1.1 Episode

Description

The Episode is a central concept. It corresponds to one complete trip through the eCAF business process – from the beginning of Preparation through to the end of Delivery. It is a self-contained unit of information, suitable for passing between practitioners and systems as required.

A child may have several Episodes spread over a period of time, as problems flare up and are then resolved. However there should never be more than one Episode underway at any one time. (The Common Assessment is intended to be holistic, so it would miss the point to have different practitioners conducting different Episodes concurrently)

The Episode is the main container for controlling access, and for grouping the "items" within it. (For example: Assessment, Action Plan, Progress Review). A full history is kept of everything within the Episode.

Relationships

Relationship Description	Cardinality	Notes
An Episode **has** any number of Episode Items	1 – 0 or more	The Episode can be imagined as a "folder" with the Episode Items as "pages" within it. It is quite valid to create an empty Episode – this may be done as a placeholder to indicate the intention to do an assessment once the Preparation work is complete. There can be any number of Episode Items in the Episode, and this number will increase over time.
The Episode **has** any number of Child Relationships associated with it	1 – 0 or more	Each Episode has a set of Child Relationships associated with it – linking to Citizens, Practitioners and Organisations associated with the child. This can be seen as a representation of the "team around the child". (For more detail see the section on Episode Team)

An Episode **has** an Episode Coordinator	1 - 1 or more	Every Episode must always have a "Coordinator". This may change over time, but there should be exactly one Episode Coordinator at any moment. The Episode Coordinator role can only be fulfilled by a fully populated Service Provision relationship, which includes a specified contact practitioner.
An Episode **has** any number of Access Control List Entries.	1 – 0 or more	The Access Control List specifies who may access the data in the Episode
An Episode **has** any number of Additional Access Decisions	1 – 0 or more	These record decisions to grant access without completing the usual Consent Statement.
An Episode **has** one or more Episode Versions	1 – 1 or more	These record historical "snapshots" of the Episode at points in time.

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	Arbitrary, globally unique identifier for the Episode. It is intended as a behind-the-scenes field for computer use. Humans will search for the record by means of the Assessed Child details.	K	Y	UniqueId
CurrentVersionNumber	A version number for the Episode record. This is increased by one each time there is an update of any kind to the Episode. (For example, contact details are changed or an Assessment is added). The version number provides a quick and easy way to check that any copies of the Episode are up-to-date. (For example copies	M	Y	SequenceNumber

	downloaded to mobile devices, prints given to the family/child)			
EpisodeStartDate	Date when the episode was started.	M	Y	Date
EpisodeCloseDate	Date when the episode was closed.	O	Y	Date
EpisodeArchiveDate	Date when the episode was archived.	O	Y	Date
EpisodeStatus	The status of the episode. This can be: • Live – the episode is ongoing • Closed – the episode is closed • Archived – removed from use, although not yet deleted.	M	Y	Status
ExpiryDate	The date when this episode is no longer valid and should be deleted (or maybe archived) due to Data Protection. This should be populated when an episode is closed. A default can be suggested but it is not a clear cut decision, and rather a matter of judgement depending on the details of the child's problems. Therefore it should be possible for the Episode Coordinator to adjust this on a case-by-case basis.	O	Y	Date
EpisodeLocalId	An alternative "human friendly" identifier for the Episode. For example it might contain a sequence number, or something derived from the child/practitioner's name and date. It cannot be guaranteed unique and might change when the Episode is transferred between Local Authorities. Therefore it is no substitute for the "true" EpisodeId above. Nevertheless, it is still useful as a "simple" identifier that humans can remember, note down, and search for.	O	Y	Code

4.1.2 Episode Coordinator

Description

An important Role is that of the ***Episode Coordinator***.

Each episode is required to have exactly one Coordinator. Although many practitioners may be working together to help the child, it is important that one is identified as having overall responsibility for coordinating the interactions.

In many cases the Coordinator will be the child's Lead Professional; however this will not always be so. (The Coordinator could be defaulted to the Lead Professional if the Child has one). In very simple cases an "ordinary" single practitioner may be working alone and no Lead Professional will be appointed.

The Episode Coordinator may change over time. This may happen at the beginning of the Episode, as the case is escalated from the initial practitioner and taken up by a multi-agency team. It may typically happen again towards the end of the Episode, as the child is de-escalated back towards more mainstream levels of service provision. And of course there may also be day-to-day personnel changes.

Relationships

Relationship Description	Cardinality	Notes
An Episode Coordinator **is associated with** an Episode	1 or more - 1	Every Episode must always have exactly one Episode Coordinator at any moment in time.
The Episode Coordinator role **is fulfilled by** a Child Relationship	0 or 1 – 1	The Episode Coordinator entity is really just a link between the Episode and a Service Provider who fulfils the role. This service provision must be fully populated, including a contact practitioner.

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	Arbitrary, globally unique identifier for the Episode.	K	-	UniqueId
CoordinatorSequenceNumber	A sequence number to identify this Episode Coordinator. The Episode Coordinators may change over time.	K	Y	SequenceNumber
StartVersionNumber	The Episode Version when this person started as the Episode Coordinator	M	Y	SequenceNumber
StartDate	The date when this person started as the Episode Coordinator	M	Y	Date
EndDate	The date when this person ceased to be the Episode Coordinator	O	Y	Date
RelationshipSequence Number	This identifies one of the child relationships to fulfil the role of Episode Coordinator. The selected relationship must be of type “Service Provision”, and include a contact practitioner.	M	Y	SequenceNumber

4.1.3 Episode Item

Description

An Episode Item can be loosely defined as “something that happens within the Episode”. Examples would be an Assessment, Action Plan, Progress Review, and so on.

A good analogy is to think of the Episode Items as loose-leaf paper “forms” within the “folder” of the Episode. Just like a paper form, an Episode Item is permanent. It may be edited as a draft initially, but once it is “Live” then it is kept as a permanent record and can never be changed. Updates are made by adding new, more recent, “forms” to the “folder”.

The actual Episode Item entity is deliberately very basic and generic. Most of the detail is contained in specific entities for each Episode Item content type. This makes the model easy to extend with additional “items” at a later date, if necessary.

Relationships

Relationship Description	Cardinality	Notes
An Episode Item **belongs to** an Episode	0 or more - 1	There can be any number of Items within an Episode. (See above for a more complete description)
An Episode Item **is created by** one or more Child Relationships fulfilling Episode Item Roles	1 – 1 or more	There must always be a main author (a practitioner). Any number of other Child Relationships can be involved as contributors.
An Episode Item **contains** one or more Episode Item Content entries	1 – 1 or more	These record drafts of the Episode Item

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl ?	Datatype

EpisodeId	This links the Item back to its owning Episode record.	K	-	UniqueId
EpisodeItemSequenceNumber	A sequence number to uniquely identify this Episode Item. An Episode may contain any number of Episode Items.	K	Y	SequenceNumber
EpisodeItemCreateDate	The date when this item was created	M	Y	Date
EpisodeItemLiveDate	The date when this item was finalised	M	Y	Date
EpisodeItemCloseDate	The date when this item was closed	M	Y	Date
EpisodeItemStatus	The status of this item. Valid values are: • Draft – Still being worked on, not yet ready • Live – Complete and ready for use • Closed – Items are kept as an audit trail and never physically deleted. However user errors may occur, so an item can be marked as closed. This status also has greater significance for a consent statement, as it may indicate that consent has been withdrawn.	M	Y	Status
EpisodeItemLiveVersion	The EpisodeVersionNumber when this Episode Item was set to Live. Useful for recreating history – for example the state of ChildRelationships as they looked at the time.	M	Y	SequenceNumber

4.1.4 Episode Item Content

Description

This defines the actual content of an Episode Item. It allows for several draft versions of the Episode Item to be recorded, along with a reason/comment for each. (Once an Episode Item is Live then it can never be changed)

Most of the content detail is contained in specific entities for each Episode Item content type.

Relationships

Relationship Description	Cardinality	Notes
Episode Item Content **belongs to** an Episode Item	0 or more - 1	
An Episode Item may **be further defined by** an Assessment record.	1 – 0 or 1	This is one of the possible subtypes of Episode Item Content.
An Episode Item may **be further defined by** a Consent Statement record.	1 – 0 or 1	This is one of the possible subtypes of Episode Item Content.
An Episode Item may **be further defined by** an Action Plan record.	1 – 0 or 1	This is one of the possible subtypes of Episode Item Content.
An Episode Item may **be further defined by** a Progress Review record.	1 – 0 or 1	This is one of the possible subtypes of Episode Item Content.
An Episode Item may **be further defined by** a Final Summary record	1 – 0 or 1	This is one of the possible subtypes of Episode Item Content.

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl ?	Datatype
EpisodeId	This links the content back to its owning Episode Item record.	K	-	UniqueId
EpisodeItemSequenceNumber	This links the content back to its owning Episode Item record.	K	Y	SequenceNumber

EpisodeItemContentSeqNo	A sequence number to identify the draft of an Episode Item	K	Y	SequenceNumber
EpisodeItemType	A code to identify the type of Episode Item content this is. This signifies where to look for more detailed and specific information about the item content. Available Episode Item Types are: • Assessment • Consent Statement • Action Plan • Progress Review • Final Summary	M	Y	Code
DraftCommentText	Text for notes about the reason for this draft revision	O	Y	DescriptionText

4.1.5 Episode Item Role

Description

Various people play a role in the creation of an Episode Item, and this allows the involvement to be recorded.

Relationships

Relationship Description	Cardinality	Notes
An Episode Item Role **is involved in the creation of** an Episode Item	1 or more - 1	There must always be a main author (a Service Provider, with practitioner details populated). Any number of other parties can be involved as contributors.
Various Episode Item Roles are **fulfilled by** Child Relationships.	0 or more - 1	This relationship links the Roles to the actual Child Relationships who fulfil them. A Child Relationship can only be involved in one Role with a given Episode Item, but they could have further roles on many different Episode Items.

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl ?	Datatype
EpisodeId	This links back to the owning Episode Item.	K	-	UniqueId
EpisodeItemSequenceNumber	This links back to the owning Episode Item.	K	-	SequenceNumber
RoleSequenceNumber	A sequence number to uniquely identify this Role in creating the Episode Item.	K	Y	SequenceNumber
EpisodeItemRoleCode	A code to identify the Role that this person played in creating this item. Valid values are: • Author – the main person responsible for the item. There should only be one author, and they should be of type	M	Y	Code

	"Service Provision", with contact practitioner details populated. • Contributor – someone who was consulted or involved in creating the item. There can be any number of contributors, and they can be of any Relationship Type. (For example, this includes practitioners, parents, and other adults involved with the child).			
RelationshipSequenceNumber	This identifies which of the "relationships" involved in this Episode fulfilled this role. This identifies one of the child relationships to fulfil this role on the Episode. See above for business rules about which relationship types are valid in which roles.	M	Y	SequenceNumber
CommentText	Further text to describe this person's role in creating the Episode Item.	O	Y	CommentText

4.1.6 Episode Version

Description

The Episode Version records keep track of previous versions of the Episode. This fulfils the essential task of keeping a full audit history. It must be possible to recreate the Episode at any point in time.

The most important concept in terms of versioning is that data is always ADDED to the Episode – and never deleted or changed. For example, new Episode Items can be added to supersede previous items, but the old ones still remain. In a similar way, revised details about Episode Parties and Relationships can be added - but the old ones remain as an historical record. The “folder” analogy is useful again here – new sheets of paper can be added to the folder, but the old ones are never changed or removed.

This model in fact makes it simple to capture a “snapshot” of the Episode at any point in time. All that is required is to note the sequence number of the “top sheet” for each of the data items at that moment.

While the model is fundamentally simple, it is worth highlighting a subtlety in the area of Child Relationships.

Child Relationships are used to record the involvement of people at various points in time. For example, an Action Plan may be created and a doctor assigned an action. After the involvement is noted, then subsequent versions of the Episode may update the doctor’s details. For example, the phone number may change. Or, more radically, the child may get a different doctor.

When viewing the Action plan then it may indeed be desired see this latest information about the doctor - and this is done by simply looking at the latest versions of the records. However, alternatively, the aim may be to recreate the Action Plan exactly as it originally looked. To do this it is necessary to:

1) Deduce the Episode Version Number where the Action Plan was created. (Using MaxEpisodeItemSeqNo, and/or also stamped on the Episode Item by EpisodeItemLiveVersion.)
2) Look at the Relationship and Party details as they were in that Episode Version (Using MaxRelationshipHistorySeqNo and MaxPartyHistorySeqNo for that EpisodeVersion)

Note that the above is just an example, and the same logic applies to all places where Child Relationships are referenced

Relationships

Relationship Description	Cardinality	Notes
An Episode Version **records the history of** an Episode	1 or more - 1	
An Episode Version **captures the latest state of Child Relationships in** an Episode Relationship Version	1 - 0 or more	
An Episode Version **captures the latest state of Episode Parties in** an Episode Party Version	1 – 0 or more	
An Episode Version **captures the latest state of Episode Items in** an Episode Party Version	1 – 0 or more	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl ?	Datatype
EpisodeId	Link back to the Episode which these versions belong to.	K	-	UniqueId
EpisodeVersionNumber	The version number. An arbitrary sequence number, used to capture a “snapshot” of the Episode at a point in time	K	Y	SequenceNumber
MaxEpisodeRoleSeqNo	The highest sequence number on an Episode Role at the point where this Episode Version was created. (Conceptually, recording the “top sheet” at that moment)	O	Y	SequenceNumber
MaxEpisodeItemSeqNo	The highest sequence number on an Episode Item at the point where this Episode Version was created.	O	Y	SequenceNumber
MaxACLSeqNo	The highest sequence number on the Access Control List at the point where this Episode Version was created.	O	Y	SequenceNumber
MaxAADSeqNo	The highest sequence number for an Additional Access	O	Y	SequenceNumber

	Decision at the point where this Episode Version was created.			
MaxChildRelationshipSeqNo	The highest sequence number on a Child Relationship at the point where this Episode Version was created.	O	Y	SequenceNumber
MaxEpisodePartySeqNo	The highest sequence number on an Episode Party at the point where this Episode Version was created.	O	Y	SequenceNumber
RecordMetadata	An essential part of the audit trail, this captures the user who created this version, and the timestamp when it was done.	M	Y	RecordMetadata Structure

4.1.7 Episode Relationship Version

Description

It is not enough just to know which relationships were in existence at the time an Episode Version was created. For each Child Relationship, it is also necessary to know the stage in its history

Relationships

Relationship Description	Cardinality	Notes
An Episode Relationship Version **captures the latest state of Child Relationships** at the time of creating the Episode Version	0 or more - 1	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl ?	Datatype
EpisodeId	Link back to the Episode Version record.	K	-	UniqueId
EpisodeVersionNumber	Link back to the Episode Version record.	K	Y	SequenceNumber
RelationshipSequenceNumber	The Child Relationship which we are capturing a snapshot of	K	Y	SequenceNumber
MaxRelationshipHistorySeqNo	The latest history sequence number for the Child Relationship at the point this Episode Version is created.	M	Y	SequenceNumber

4.1.8 Episode Party Version

Description

It is not enough just to know which Episode Parties were in existence at the time an Episode Version was created. For each Episode Party, it is also necessary to know the stage in its history

Relationships

Relationship Description	Cardinality	Notes
An Episode Party Version **captures the latest state of Episode Parties** at the time of creating the Episode Version	0 or more - 1	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl ?	Datatype
EpisodeId	Link back to the Episode Version record.	K	-	UniqueId
EpisodeVersionNumber	Link back to the Episode Version record.	K	Y	SequenceNumber
EpisodeParty SequenceNumber	The Episode Party which we are capturing a snapshot of	K	Y	SequenceNumber
MaxPartyHistorySeqNo	The latest history sequence number for the Episode Party at the point this Episode Version is created.	M	Y	SequenceNumber

4.1.9 Episode Item Version

Description

Episode Items are never changed once they are set to “live” status. However, prior to this they may be at status “draft” and this entity is used to keep a full history of any draft revisions.

Relationships

Relationship Description	Cardinality	Notes
An Episode Item Version **captures the latest state of Episode Item drafts** at the time of creating the Episode Version	0 or more - 1	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl ?	Datatype
EpisodeId	Link back to the Episode Version record.	K	-	UniqueId
EpisodeVersionNumber	Link back to the Episode Version record.	K	Y	SequenceNumber
EpisodeItem SequenceNumber	The Episode Item which we are capturing a snapshot of	K	Y	SequenceNumber
MaxEpisodeItemContent SeqNo	The latest content sequence number for the Episode Item at the point this Episode Version is created.	M	Y	SequenceNumber

4.1.10 Episode Shielding

Description

The Episode Shielding entity allows an Episode to be hidden from searches. This makes the Episode extremely private – it can be viewed by practitioners on the Access Control List, but others will not even be able to discover its existence.

Every time a shielded Episode is suppressed from search results, the system should notify the Episode Coordinator – so that they can see the interested practitioner and decide to make contact if appropriate.

Shielding should NOT be a common state of affairs, as the point of an eCAF system is to allow practitioners to discover that an Episode exists and get involved in it. There should therefore be a review process to check that shielding entries are justified. None the less, having shielding available makes it possible to manage even very sensitive problems using the eCAF system.

Relationships

Relationship Description	Cardinality	Notes
An Episode Shielding entity **belongs to** and Episode	0 or more - 1	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl ?	Datatype
EpisodeId	Link back to the Episode.	K	-	UniqueId
EpisodeShieldingSeqNo	An arbitrary sequence number to identify this shielding entry	K	Y	SequenceNumber
ShieldingStartDate	The date when shielding started	M	Y	Date
ShieldingEndDate	The date when shielding stopped	O	Y	Date
ShieldingStatus	The status of this shielding record. Valid values are: • **Live** – in force • **Closed** – no longer in force	M	Y	Status

ShieldingReasonText	Free text to explain why this Episode is to be hidden from searches. There may be a temptation for some practitioners to misuse shielding to support “siloed working”. Therefore it is important for this text to be filled in with a valid reason	M	Y	ParagraphText
RecordMetadata	Standard record metadata to record the user and timestamp	M	Y	RecordMetadata

4.2 Episode Team

This section explains the model for the Episode Team.

The team is based on the concept of a “party”, which is a generic concept used to signify any kind of person or organisation. This could include, for example, the child, parents, other family members, practitioners, agencies and other teams working on the Episode. This section describes how these “parties” involved with the child are modelled.

In the eCAF system, the concept of a “party” is in fact secondary to that of a “relationship”. This is because everything is based around the child – a person or practitioner is not of interest in their own right, but because of their relationship with the child.

There are three types of relationship that can be modelled:

- Personal relationship – family members and others (eg careers)
- Service Provision – organisations and practitioners providing services
- Service Request – requests for services, yet to be confirmed

Perhaps the most important, and unusual, concept to understand in terms of the Episode Team is that all the Relationships and Parties are scoped within a single Episode. This is consistent with the idea of the Episode as a self-contained “folder” of information. It contains a practical set of data to help with work around the child on a particular set of needs.

However this explicity does mean that the same “real life” person may have multiple records in the database if they are associated with more than one Episode.

There are a number of reasons for this:

- **Transferability of the Episode**

It is extremely important that each Episode “folder” is completely self-contained and can be transferred between systems belonging to different agencies and Local Authorities. Therefore the existence of any external reference data cannot be assumed – the Episode must hold everything that it needs.

- **Identity Management issues**

Identity management means, in simple terms, how to know that the “Fred Bloggs” one practitioner mentions is actually the same person as the “Frederick Blogs” another has already recorded. While difficult to solve within a single Local Authority, this problem becomes even more difficult when considering cross-border sharing.

The exact situation is slightly different for each type of party:

- Citizen

  It would be quite easy to identify citizens using their National Insurance Number – with other facts such as surname, date of birth or postcode being useful as a backup.

However it is specifically not permitted to do this by Data Protection guidelines. The purpose of storing data on citizens is to have contact details for coordinating the actions around a single child. Any attempt to record more or to "join-up" the data is beyond the purpose for which the information was given.

- Child

  There is no easy way to uniquely identify a child. However this is a problem which the IS Index project is specifically addressing. The role of eCAF is to link with the IS Index for the management of a child's identity.

- Practitioners and Organisations

  It might be desirable to avoid duplication by "joining up" practitioner details – but while there is no legal barrier to this, it is also not easy to do. The situation varies by sector, with some having well formed identification schemes and others (eg voluntary sector) having very little. There is no overall consistent scheme that can be used.

  Some Local Authorities may have implemented a Service Directory and this can help to solve the problem on a local level. The Service Directory might help with selecting practitioners initially and with keeping the details up-to-date over time. Links (in the form of "LocalId" fields) are suggested for integration with any local Service Directory that exists.

  Still, eCAF cannot require a Service Directory as a pre-requisite and, even in the best case, these links are likely to be lost when an Episode is transferred to another Local Authority.

- **Confidentiality**

The final reason for keeping Episode details separate is for confidentiality. CAF information will be widely shared across agencies, and extreme care is needed that it is not disclosed in an inappropriate way.

The basic mechanism is one of consent, with the understanding that nothing within an Episode will be shared without the child/family's agreement. Much information is "harmless" under normal circumstances (for example address, contact details, other practitioners involved) – but there are cases where it could be harmful. Even disclosing information between Episodes for the same child could cause problems if circumstances have changed. Sharing of information between practitioners is of course to be encouraged – but not if it can happen "by accident" without the child's agreement.

The final point on confidentiality is that even the appearance of the system "knowing things" in relation to innocuous data items may cause the wrong perception and erode trust in the confidentiality of more sensitive data.

Therefore each Episode is treated as a completely separate folder of information.

4.2.1 Child Relationship

Description

The eCAF Episode Team is based on Relationships around the child. This is allows the “team around the child” to be built up and populated.

A Child Relationship is a generic concept to capture data common to all types of relationship. For example, it could mean a Personal Relationship linking an Assessed Child to their parents and siblings. Or it could mean a Service Provision, linking an Assessed Child to organisations and practitioners.

A full history is kept of all changes to a Child Relationship. This history is not of great interest in itself, but is needed for audit purposes. Child Relationships are used to record the involvement of people and organisations with the child, so it is important that the exact details of the person involved at that point in time can be recreated.

Child Relationships are specific to a single child, and only exist within the context of a single Episode. (A feature to “copy” from any previous Episodes to which the user has access could be useful to save typing).

.

Relationships

Relationship Description	Cardinality	Notes
A Child Relationship **belongs to** an Episode	0 or more - 1	
A Child Relationship may be **further defined by** Personal Relationship information.	1 – 0 or 1	These are the more detailed subtypes of the Child Relationship entity. Each Child Relationship will be connected to exactly one subtype record, as specified in the Child Relationship Type field.
A Child Relationship may be **further defined by** Service Request information.	1 – 0 or 1	Another subtype of Child Relationship.
A Child Relationship may be **further defined by** Service Provision information.	1 – 0 or 1	Another subtype of Child Relationship.
A Child Relationship **is referred to by** a Service Request.	1 – 0 or more	Records the Service Provider who requested this service

A Child Relationship **is referred to by** a Consent Statement.	1 – 0 or more	Records the person who granted the consent. This would normally be someone with Parental Responsibility – most likely a Personal Relationship, but possibly a Service Provision (eg if the child is in care)
A Child Relationship **is referred to by** an Consent Statement Entry.	1 - 0 or more	Records the Service Provider who is being granted consent.
A Child Relationship **is referred to by** an Action.	1 - 0 or more	Records the person/organisation who the action is assigned to.
A Child Relationship **fulfills** the role of Episode Coordinator	1 - 0 or more	
A Child Relationship **fulfills** an Episode Item Role	1 - 0 or more	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	Link back to the Episode that this Child Relationship belongs to. (As described above, relationships are specifically centred around a single Episode, and the information needed to manage this specific set of needs).	K	-	UniqueId
RelationshipSequence Number	Arbitrary sequence number to identify the relationships within an Episode.	K	Y	SequenceNumber
RelationshipHistory SequenceNumber	A sequence number to define this record's position in the history. (Only the latest record is usually of interest, and in a physical implementation it may be useful to add a flag to easily identify this)	K	Y	SequenceNumber

EffectiveDate	The date when this record became relevant	M	Y	Date
RelationshipStatus	The status of this relationship. Valid values are: • Live • Closed	M	Y	Status
ChildRelationshipType	A code to identify the type of Child Relationship this is. This signifies where to look for more detailed and specific information about it. Valid Child Relationship Types are: • Personal Relationship – This links an Assessed Child with their parents and siblings. • Service Provision – This links an Assessed Child with an organisation and (optionally) practitioner who are providing a service. • Service Request – As per Service Provision, but only requested and not yet active.	M	Y	Code
SensitiveRelationshipFlag	A yes/no flag to indicate that this is a “sensitive” relationship. This might be a sensitive service provision (for example pregnancy or drugs counselling) where additional confidentiality considerations apply. It could also be a sensitive family relationship where additional confidentiality is needed.	M	Y	Yes/No
PPRFlag	A flag to indicate if this is a Person with Parental Responsibility. Note that a history is kept of all Relationships, and thus of Parental Responsibility. This is important as it may be necessary to prove later that an appropriate person granted consent.	M	Y	Yes/No

	Note also that this flag is on the generic “relationship” level. Normally it will be relevant to a Personal Relationship. However occasionally it may be used on a Service Provision – for example, this would happen if the child was in Local Authority care.			
PPRDate	Date of determination of PPR Flag.	O	Y	Date
CommentText	Other general comments about the relationship	O	Y	CommentText

4.2.2 Personal Relationship

Description

A Personal Relationship allows the links between the Assessed Child and members of the public (Citizens) to be recorded. Typically this would be family members, although others (eg Carers) are also possible.

Note that the relationship is always centred on the Assessed Child and specifically does NOT allow the general modelling of family trees. This would be beyond the purpose for which this data is held.

Like all other relationships, Personal Relationships only exist within the context of a single Episode.

Relationships

Relationship Description	Cardinality	Notes
A Family Relationship **links** the Assessed Child to a Citizen	0 or more - 1	
A Personal Relationship **further defines** a Child Relationship.	0 or 1 - 1	These are the more detailed subtypes of the Child Relationship entity. Each Child Relationship will be connected to exactly one subtype record, as specified in the Relationship Type field.

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	Link back to the Episode	K	-	UniqueId
RelationshipSequence Number	Arbitrary sequence number to identify the relationship within an Episode	K	Y	SequenceNumber
RelationshipHistory SequenceNumber	A sequence number to define this record's position in the history.	K	Y	SequenceNumber

ToCitizen EpisodePartySeqNo	Pointer to the Citizen Episode Party who this relationship applies to. (Note that the link is to the Episode Party in general, and not to a specific historical moment. This is correct, as changing the internal details of the Episode Party does not affect their involvement with the relationship – which should be kept up-to-date)	M	Y	UniqueId
ChildRelationshipCode	A code to indicate the person's relationship with the child. This was originally provided by GovTalk, but is now depreciated. Therefore the following list is defined for eCAF: • parent • guardian • fosterparent • auntuncle • stepparent • grandparent • other	M	Y	Code
ChildRelationshipDescription	A text description of the relationship. (Particularly relevant if "other" is selected)	M	Y	DescriptionText

4.2.3 Service Provision

Description

A Service Provision relationship links an Assessed Child to an Organisation, optionally nominating a contact Practitioner. This relationship allows the network of services around the child to be captured.

This entity reflects the understanding that services are primarily provided to children by Organisations. A specific Practitioner may not be known at the time of choosing the service, and indeed the specific personnel may change over time.

Like all other relationships, Service Provisions only exist within the context of a single Episode.

Relationships

Relationship Description	Cardinality	Notes
A Service Provision **links** an Assessed Child and an Organisation.	0 or more - 1	
A Service Provision **may involve** a Practitioner as the contact point.	0 or more - 1	
A Service Provision **further defines** a Child Relationship.	0 or 1 – 1	
A Service Provision **may originate from** a Service Request	0 or 1 – 1	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	Link back to the Episode	K	Y	UniqueId
RelationshipSequence Number	Arbitrary sequence number to identify the relationship within an Episode	K	Y	SequenceNumber

RelationshipHistory SequenceNumber	A sequence number to define this record's position in the history.	K	Y	SequenceNumber
ToOrganisation EpisodePartySeqNo	Pointer to the Organisation Episode Party who this relationship applies to. This is the organisation providing the service. (Could be a public organisation such as a school, or a more specific small team within a larger public "organisation") (Note that the link is to the Episode Party in general, and not to a specific historical moment. This is correct, as changing the internal details of the Episode Party does not affect their involvement with the relationship – which should be kept up-to-date)	M	Y	UniqueId
ServiceCategoryCode	A code to define the type of service. This is extremely useful for Management Information. However a careful balance is needed, as if the standard list is too detailed then it will become volatile and contentious. The following is therefore deliberately high-level. The existing list from the Connexions CCIS project is used as a basis • Truants (LEA, exclusion, attendance, Educational Welfare Officers, Out of School unit) (TRUNT) • Drug abuse (DRGAT) • Education Welfare Services (EDWFS) • Homeless Agencies (HMLSA) • Social services (SOCSV) • Sure Start Plus (SSPLS) • Teenage Pregnancy (TPREG) • Voluntary youth sector (VOLYS) • Youth Offending (YTHOT) • Young person's advisers (YPADV)	M	Y	Code

	• Youth Service (YTHSV) • Jobcentre Plus (JCPLS) • Care leavers (Social Services) (CRLVR) • Careers (CRRSV) • Child and Adolescent mental health (CAMTH) • Educational services (EDUSV) • Health (HELTH) • Housing (HOUSG) • Police (POLIC) • Connexions (CONEX) • Other (OTHER)			
ServiceDescription	A text description of the service. For example “Social Services” or “Housing”. This might be used to add more detail to the broad codes above, or to define “other”	M	Y	DescriptionText
ContactPractitioner EpisodePartySeqNo	This links the service provision to a practitioner. It is an optional field because a specific practitioner may not always be known, especially at the point of first selecting the service.	O	Y	UniqueId
LeadProfessionalFlag	This indicates whether this service is fulfilling the Lead Professional role with the child. This can only be “Yes” if a contact practitioner is known.	M	Y	Yes/No
OriginatingRequest RelationshipSequence Number	It may be that a Service Provision is created as the result of confirming a Service Request. In that case the Service Request will be closed down at that point, but this field is used to maintain the trail back to the originating request.	O	Y	SequenceNumber

4.2.4 Service Request

Description

A Service Request is basically similar to a Service Provision, but at an earlier stage in the lifecycle as it is simply a request and does not yet actually exist.

The Service Request may be agreed and go forwards to be converted into a Service Provision. Or it may be refused and closed without further action resulting.

Capturing Service Requests is useful for consent and action planning, as it allows plans to be made on the basis of desired services - with the detailed referrals completed later.

It also provides useful monitoring and Management Information possibilities, as the open Service Requests can be tracked, and statistics might be collated of “most requested services”, “who requests what services”, “refused service requests”, etc.

(Note: The Service Request is not explicitly part of the paper CAF form - but it is mentioned in the Guidance toolkit and agreed as a valuable aspect of e-enablement)

Relationships

Relationship Description	Cardinality	Notes
A Service Request **requests involvement of** an Assessed Child and an Organisation.	0 or more - 1	
A Service Request **may involve** a Practitioner as the contact point.	0 or more - 1	
A Service Request **further defines** a Child Relationship.	0 or 1 – 1	
A Service Request **may progress into** a Service Request	1 - 0 or 1	
A Service Request **is requested by** a Child Relationship	1 - 0 or 1	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	Link back to the Episode	K	Y	UniqueId
RelationshipSequence Number	Arbitrary sequence number to identify the relationship within an Episode	K	Y	SequenceNumber
RelationshipHistory SequenceNumber	A sequence number to define this record's position in the history.	K	Y	SequenceNumber
ToOrganisation EpisodePartySeqNo	Pointer to the Organisation Episode Party who this relationship applies to. This is the organisation providing the service. (Could be a public organisation such as a school, or a more specific small team within a larger public "organisation") (Note that the link is to the Episode Party in general, and not to a specific historical moment. This is correct, as changing the internal details of the Episode Party does not affect their involvement with the relationship – which should be kept up-to-date)	M	Y	UniqueId
ServiceCategoryCode	A code to define the type of service. This is useful for Management Information. See Service Provision section for more detail and a list of values.	M	Y	Code
ServiceDescription	A text description of the service. For example "Social Services" or "Housing". This might be used to add more detail to the broad codes above, or to define "other"	M	Y	DescriptionText
ContactPractitioner	This links the service request to a practitioner.	O	Y	UniqueId

EpisodePartySeqNo	It is an optional field because a specific practitioner may not always be known, especially at the point of first selecting the service. There are a few considerations around this: If a contact practitioner is provided (including user id) then the service request can be routed directly to them to look at. If there is no contact practitioner (or the contact practitioner does not have a user id) then this is obviously not possible. These requests may have to be routed to a regional CAF Coordinator to sort out.			
RequestorRelationship Seqno	A reference to the ServiceProvider who requested this new Service. May be useful for practical purposes of asking them for more information and updating them on progress. May also be useful for reporting – to analyse patterns of who requests what. (eg regular referrals from schools to speech therapy etc)	M	Y	SequenceNumber
RequestReasonText	A text description of the justification and reasoning behind this request.	O	Y	ParagraphText
ServiceRequestStatus	The status of this service request. Valid values are: • **Requested** – proposed but not yet confirmed • **Confirmed** – confirmed and in place • **Refused** – service was requested but declined (inappropriate or not available) It is important to understand the lifecycle of a request and the interplay between this “Service Request Status” and the more general “Relationship Status” field.	M	Y	Status

	The Service Request will start off with Relationship Status = “Live” and Service Request Status = “Requested”. After following up the referral then the Service Request Status will change to either “Confirmed” or “Refused”, and the Relationship Status to “Closed”. (This Service Request has now served its purpose and is finished). However if the outcome was for the request to be agreed (“Confirmed” Service Request Status), then a new Service Provision will have been created – based on the details in the Service Request and linked to it.			
RefusalReasonText	If a requested service is refused, then this provides some free text to record the reason why.	O	Y	ParagraphText

4.2.5 Episode Party

Description

A “party” is a person or organisation. This is a very generic concept that may be used to encompass the child, parents, siblings, practitioners, teams, and agencies. While there are obvious differences between these entities, there are also many similarities. For example, they will all have contact details, and any one of them may be involved in the plans and actions around the child. The generic “party” concept allows them to be treated interchangeably where this is useful.

At the same time, an “Episode Party Type” code is defined, and this allows more specific information to be recorded where necessary.

In the eCAF system all party records are only relevant in the context of a single Episode. Within a single Episode, the same Episode Party entity will be referenced and could, for example, be available to select from drop-downs. However, when a new Episode is created, none of the other Parties in the database will be visible. New (duplicate) Episode Party records will be created to populate the relationships around this child - even if, in fact, they in fact refer to the same “real-life” person or organisation. The reasons for this are further explained in the introduction to this chapter.

A full history is kept for each Episode Party. Only the latest information is actually of interest at any point in time but the full history is needed for audit purposes - specifically to recreate a Relationship as it was when, for example, granting consent or assigning an action.

Relationships

Relationship Description	Cardinality	Notes
An Episode Party **has** an Address.	1 – 0 or 1	An address is optional, but should be provided where known. In reality the party may have multiple addresses, but intention is for only a single contact address to be recorded for eCAF purposes.
An Episode Party may be **further defined by** Citizen information.	1 – 0 or 1	A possible subtype of Episode Party.
An Episode Party may be **further defined by** Practitioner information.	1 – 0 or 1	Another possible subtype of Episode Party

An Episode Party may be **further defined by** Organisation information.	1 – 0 or 1	Another possible subtype of Episode Party

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	Link back to the Episode	K	-	UniqueId
EpisodeParty SequenceNumber	This is an arbitrary sequence number to identify this Party within the Episode. As explained previously, there is no attempt to uniquely identify Parties beyond the scope of an Episode.	K	Y	SequenceNo
PartyHistorySequence Number	A sequence number to define this record's position in the history. (Only the latest record is usually of interest, and in a physical implementation if may be useful to add a flag to easily identify this)	K	Y	SequenceNo
EffectiveDate	The date when this record became relevant	M	Y	Date
EpisodePartyType	A code to identify the type of Episode Party this is. This signifies where to look for more detailed and specific information about the Episode Party. Valid Episode Party Types are: • Citizen – This is a general term to cover children and adults. The point is to separate "members of the public" from "service providers" such as practitioners. • Practitioner – An individual practitioner working with the child. • Organisation – This could be any type of organisation. For example; an agency, a group of agencies, a cross-agency	M	Y	Code

	team, or a small team within a large agency.			
ContactAddressId	This links the Episode Party to some Address details. This is optional but should be filled in whenever known. Note that at any moment only one address is stored for a party. Our aim is not to provide a full model of the complexities of the party (other systems do that), but rather to keep a single set of details for the practical purposes of CAF communications	O	-	Unique Identifier
ContactDetails	Contact details (email, fax, phone) for getting in touch with this Episode Party.	O	-	ContactDetails Structure

4.2.6 Citizen

Description

A Citizen is a type of Episode Party. It is a broad term which encompasses any members of the public who have significant involvement with the child. This would certainly include the child themselves along with their parents, and could also cover carers, siblings, and other family members.

Like other Episode Parties the Citizen only exists within a single Episode, and the same “real life” person may be in the database twice if they are involved in two Episodes.

Relationships

Relationship Description	Cardinality	Notes
A Citizen **further defines** an Episode Party	0 or 1 - 1	
A Citizen may be **further defined by** Assessed Child information.	1 – 0 or 1	The Assessed Child is a special type of Citizen. The purpose of the CAF is to work with the Assessed Child, so additional detailed information is captured about them.
A Citizen may **be linked to** an Assessed Child via a Personal Relationship	1 to 0 or more	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	Link back to the Episode	K	-	UniqueId
EpisodeParty SequenceNumber	This is an arbitrary sequence number to identify this Party within the Episode.	K	Y	SequenceNo

PartyHistorySequence Number	A sequence number to define this record's position in the history.	K	Y	SequenceNo
PersonName	The citizen's name.	M	Y	PersonName Structure
Gender	A code to indicate the citizen's gender. Valid values are defined by GovTalk as follows: • Male • Female • Unknown • Other	M	Y	Code
EthnicityCode	An optional code to identify the citizen's ethnic origins. A standard list of ethnic origins is provided on GovTalk.	O	Y	Code
EthnicityDescription	A text description of the ethnicity. (Particularly relevant if "other" is selected)	O	Y	DescriptionText
ReligionCode	An optional code to identify the citizen's religion. A standard list of religions is provided on GovTalk.	O	Y	Code
ReligionDescription	A text description of the religion. (Particularly relevant if "other" is selected)	O	Y	DescriptionText
LanguageCode	An optional code to identify the citizen's first language. A standard list of language codes is provided on GovTalk (via reference to OASIS spec).	O	Y	Code
LanguageDescription	A text description of the language.	O	Y	DescriptionText
AssessedChildFlag	A yes/no flag to indicate if this is, in fact, an Assessed Child type of Citizen, with additional information available.	M	Y	Yes/No

4.2.7 Assessed Child

Description

An Assessed Child is a type of Citizen, which is a type of Episode Party.

Note that throughout this document the word “child” is used in its broadest sense as shorthand for “child, baby, or young person”.

Like other Episode Parties the Assessed Child only exists within a single Episode, and so a fresh Assessed Child record will be made for the same “real life” child every time a new Episode is opened.

Every Episode must have exactly one Assessed Child record within it.

Relationships

Relationship Description	Cardinality	Notes
An Assessed Child record **further defines** a Citizen	0 or 1 - 1	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	Link back to the Episode	K	-	UniqueId
EpisodeParty SequenceNumber	This is an arbitrary sequence number to identify this Party within the Episode.	K	Y	SequenceNo
PartyHistorySequence Number	A sequence number to define this record’s position in the history.	K	Y	SequenceNo
DateOfBirth	The child’s date of birth	M	Y	Date
DOBVerificationLevel	A code to indicate certainty about the date of birth. Valid values are defined by GovTalk as follows:	O	Y	Code

	• Unverified • Secondary certificatation • Primary certification (eg Birth certificate)			
PreBirthFlag	Indicates if this is currently an unborn child	M	Y	Yes/No
DisabledFlag	A flag to indicate if the child is considered disabled	M	Y	Yes/No
DisabledText	Text to describe the nature of any disability	O	Y	CommentText
CommunicationFlag	A flag to indicate if there are communication or language difficulties.	M	Y	Yes/No
CommunicationText	Text to describe the nature of any communication difficulties	O	Y	CommentText
ImmigrationStatus	A code to indicate the immigration status of the child [DN: This is currently free text as no confirmed code list available June 2006]	O	Y	Code
SpecialRequirementsText	Text to describe any further special requirements to consider for this child	O	Y	CommentText
HomeSituationText	Further free-text description about the child's home situation	O	Y	ParagraphText
AccountableBody	The Local Authority responsible for this child. May be defaulted to the Local Authority who owns the eCAF system. Or may be able to be populated from IS Index data.	O	Y	Code

4.2.8 Alias

Description

For any Citizen (including Assessed Child), a number of aliases may be stored. This is in line with the paper CAF form and may assist with identifying the Assessed Child.

(Note that once the IS Index system is Live then it will become the main source of identity information about a child, and the need to keep aliases in eCAF will be less).

Relationships

Relationship Description	Cardinality	Notes
A Citizen **has** any number of Aliases	1 to 0 or more	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	Link back to the Episode	K	-	UniqueId
EpisodeParty SequenceNumber	This is an arbitrary sequence number to identify this Episode Party within the Episode.	K	Y	SequenceNo
PartyHistorySequence Number	The link back to the Citizen record.	K	Y	SequenceNo
AliasSequenceNumber	An arbitrary sequence number to identify the alias	K	Y	SequenceNo
Alias	The alternative name by which this person is known	M	Y	PersonName Structure

4.2.9 Practitioner

Description

A Practitioner is a type of Episode Party. It identifies an individual involved in helping the child.

Like other Episode Parties the Assessed Child only exists within a single Episode, and the same “real life” practitioner may be in the database twice if they are involved in two Episodes. See the introduction to this chapter for further explanation of this, and a discussion of the role of a Service Directory in helping to join things up on a local level.

(Another simple alternative might be to provide a “personal address book” feature for users. This concept, familiar from email systems, would allow a user to quickly and accurately populate details of their common contacts).

Relationships

Relationship Description	Cardinality	Notes
A Practitioner record **further defines** an Episode Party	0 or 1 - 1	
A Practitioner may **be linked to** an Assessed Child via the contact practitioner on a Service Provision or Service Request	1 to 0 or more	
A Practitioner may **be associated with** a User	0 or more to 1	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype

EpisodeId	Link back to the Episode	K	-	UniqueId
EpisodeParty SequenceNumber	This is an arbitrary sequence number to identify this Episode Party within the Episode.	K	Y	SequenceNumber
PartyHistorySequence Number	A sequence number to define this record's position in the history.	K	Y	SequenceNumber
PractitionerName	The practitioner's name	M	Y	PersonName Structure
PractitionerDescription	Text to describe what the practitioner does. For example "GP", "Teacher".	M	Y	DescriptionText
PractitionerLocalId	An optional identifier for internal use only. Links the practitioner to records in a local Service Directory, allowing for automatic updating and "joining up" of records for the same practitioner.	O	N	Free
PrincipleSecurityDomainId	The security domain that the user belongs to. (UserIds only unique within a security domain – this allows for federated user management)	O	Y	Code
UserId	The system user id associated with this practitioner. Not all practitioners will be system users, so this is an optional field. (If populated then it may be able help by automating/suggesting population of the Access Control List)	O	Y	PrincipleId

4.2.10 Organisation

Description

An organisation is a type of Episode Party. Organisation is a broad term which may encompass an agency, a cross-agency team, or a small team within a larger agency.

This entity allows for the capture of more specific details about an Organisation.

Many of the same issues apply to Organisations as to Practitioners, in so far as a uniquely identifiable list of organisations might be desirable but cannot be enforced as part of an eCAF solution. Again a “personal address book” for organisations would be a useful feature. However ultimately, like other Parties, organisations only exist within the context of a single Episode.

Local implementations may wish to add further information about organisations – in particular to categorise them by type and the services they provide. This could provide useful local Management Information. However the categorisations are varied and volatile, and are not necessary for the functioning of this national core dataset.

Relationships

Relationship Description	Cardinality	Notes
An Organisation **further defines** an Episode Party	0 or 1 - 1	
An Organisation may **be associated with** an Assessed Child via a Service Provision or Service Request	1 to 0 or more	
A Practitioner may **be associated with** a Group	0 or more to 1	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	Link back to the Episode	K	-	UniqueId

EpisodeParty SequenceNumber	This is an arbitrary sequence number to identify this Episode Party within the Episode.	K	Y	SequenceNumber
PartyHistorySequence Number	A sequence number to define this record's position in the history.	K	Y	SequenceNumber
OrganisationName	The organisation's name.	M	Y	Organisation Name
VatNumber	Another common identifier for an organisation.	O	Y	VatNumber
RegCharityNumber	Another common identifier for an organisation.	O	Y	RegCharity Number
OrganisationLocalId	An optional identifier for internal use only. Links the organisation to records in a local Service Directory, allowing for automatic updating and "joining up" of records for the same organisation.	O	N	Free
PrincipleSecurityDomainId	The security domain that the group belongs to. (GroupIds are only unique within a security domain – this allows for federated user management)	O	Y	Code
GroupId	The system group id associated with this organisation. In some cases a system user-group may be set up to model the users in an organisation. In that case the link can be recorded here. (If populated then it may be able help by automating/suggesting population of the Access Control List)	O	Y	PrincipleId

4.2.11 Address

Description

An address in the GovTalk standard BS7666 format.

(A basic familiarity with BS7666 is assumed. Various references can provide more detail about this, including the GovTalk website).

Relationships

Relationship Description	Cardinality	Notes
An Address **belongs to** an Episode Party	0 or 1 - 1	This is a single “contact” address for the practical purposes of contacting them.
An Address **belongs to** a User	0 or 1 - 1	This is a single “contact” address for the practical purposes of contacting them.

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
AddressId	This is an arbitrary unique identifier to identify this Address. This is intended as a behind-the-scenes field for computer use. It is an internal field used to unambiguously refer to addresses within an eCAF system. It has no special meaning and will not feature in the data transmitted between systems. There should ideally be a one-to-one correspondence between the UPRN and this AddressId. However until the UPRN is more widely adopted then an internal alternative is necessary.	K	-	UniqueId

SAON	The Secondary Addressable Object. (eg Flat number)	O	Y	String
PAON	The Primary Addressable Object (eg House number)	M	Y	String
StreetDescription	Street description	M	Y	String 100
USRN	Unique Street Reference Number (if known)	O	Y	Number
Locality	The locality	O	Y	String 35
Town	The town	O	Y	String 30
AdministrativeArea	The administrative area	O	Y	String 30
PostTown	The post town	O	Y	String 30
PostCode	The post code	O	Y	PostCode
UPRN	Unique Property Reference Number (if known)	O	Y	Number
RecordMetadata	Standard metadata about this record. For example, last update user and timestamp.	M	Y	RecordMetadata Structure

4.3 Episode Items

Several different types of Episode Item can be attached to the Episode.

Each one can be thought of as a “form” which is used to capture specific details and store them in the “folder” of the Episode. Much of the generic work for handling this is done at the Episode Item level. However this section describes the various “forms” available and the specific details of each.

4.3.1 Common Assessment

Description

The Common Assessment is in many ways the heart of the CAF process. It captures a holistic snapshot of the child at a point in time. This may then be used as the basis for action planning and referrals.

Relationships

Relationship Description	Cardinality	Notes
An Assessment **further defines** Episode Item Content	0 or 1 - 1	This is one of the possible subtypes of Episode Item Content.
An Assessment **has** any number of Observations	1 – 0 or more	In practice it would be a strange assessment that included no observations, and a maximum of 14 different observation elements are currently defined.
An Assessment **has** exactly one set of Conclusions	1 - 1	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	This links the Assessment back to its Episode Item Content record	K	-	UniqueId
EpisodeItem SequenceNumber	This links the Assessment back to its Episode Item Content record.	K	-	SequenceNumber
EpisodeItemContentSeqNo	This links the Assessment back to its Episode Item Content record.	K	-	SequenceNumber
AssessmentReasonText	The reason for the Assessment.	M	Y	ParagraphText

4.3.2 Common Assessment Observation

Description

If the Common Assessment is the heart of the CAF process, then the Observations are the heart of the Common Assessment. This is where the holistic picture of the child is actually built.

Various practitioner-focused documents have been written containing background information about the choice of assessment criteria, as well as guidance on completing each section of the form. This information is not reproduced here.

It is worth noting that the observation data is fundamentally text based. The assessment deals with complex human problems and the general ethos is to promote discussion between people to solve those problems. It is not desired to enforce the introduction of automatic "scoring" and diagnosis systems – and on a practical note it would be difficult to gain national agreement about the choice of such a system.

However a number of Local Authorities do currently have sophisticated needs-analysis systems in place. This is an area that needs monitoring – if the difficulties above can be overcome then further needs analysis may be useful for a national eCAF system.

Relationships

Relationship Description	Cardinality	Notes
An Observation **belongs to** a Common Assessment	0 or more - 1	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	This links the Observation back to its Assessment record	K	-	UniqueId

EpisodeItem SequenceNumber	This links the Observation back to its Assessment record.	K	-	SequenceNumber
EpisodeItemContentSeqNo	This links the Observation back to its Assessment record.	K	-	SequenceNumber
Observation SequenceNumber	A sequence number to identify this Observation. There will be several Observations within an Assessment	K	Y	SequenceNumber
ObservationDomain	A code to describe the high-level domain of the Observation. Valid values are: • Development • Parents and carers • Family and environmental	M	Y	Code
ObservationElement	A code to describe the detailed Observation type. Valid values are: • Health • Emotional and social development • Behavioural development • Identity • Family and social relationships • Self-care skills and independence • Learning • Basic care • Emotional warmth and stability • Guidance, boundaries and stimulation • Family history, functioning and well-being	M	Y	Code

	• Wider family • Housing, employment and financial considerations • Social and community elements and resources			
ObservationText	Text containing the practitioner's notes for this observation element.	M	Y	ParagraphText

4.3.3 Assessment Conclusions

Description

The assessment finishes with conclusions and plans for the next steps.

There is some overlap here with the "Action plan" form which allows for more detailed planning. However the purpose of the Conclusions section is simply to sum up the Assessment, and to agree some outline next steps with the family as part of the immediate assessment process.

Relationships

Relationship Description	Cardinality	Notes
A set of Conclusions **belongs to** a Common Assessment	0 or more - 1	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	This links the Conclusions back to their Common Assessment record	K	-	UniqueId

EpisodeItem SequenceNumber	This links the Conclusions back to their Common Assessment record.	K	-	SequenceNumber
EpisodeItemContentSeqNo	This links the Conclusions back to their Common Assessment record.	K	-	SequenceNumber
ConclusionsText	“Conclusions” text	O	Y	ParagraphText
OutcomesText	“What needs to change” text	O	Y	ParagraphText
ReviewDate	Date for review	O	Y	Date
ReviewCriteriaText	“How will you know when things have improved” text	O	Y	ParagraphText
ChildCommentText	Child comment text	O	Y	ParagraphText
ParentCommentText	Parent comment text	O	Y	ParagraphText

4.3.4 Consent Statement

Description

The Consent Statement is a form in its own right. It applies to the whole Episode and any Episode Items within it.

A Consent Statement will almost certainly be completed as the final step of an Assessment, but one may also be done stand-alone at any other time. This allows the consent to change over time, as the relationship with the family develops and/or additional needs become apparent.

“Consent” is not quite the same thing as “access”. This, and other concepts, are discussed further in section “3.4 Access and Consent”. In many cases when a Consent Statement is saved then it may be possible to automatically deduce Access to the specified Parties.

Relationships

Relationship Description	Cardinality	Notes
A Consent Statement **further defines** Episode Item Content	0 or 1 - 1	This is one of the possible subtypes of Episode Item Content.
A Consent Statement **has** one or more Consent Statement Entries	1 – 1 or more	
A Consent Statement **is granted by** a Child Relationship	0 or more – 1	A person in a relationship to the child with sufficient authority to grant the consent must be selected. This ultimately relies on professional judgement, but in most cases it will be a relationship with the “Parental Responsibility” flag set.

Attributes

Attribute	Notes	Mand/ Opt/	Extrnl?	Datatype

		Key?		
EpisodeId	This links the Consent Statement back to its Episode Item Content record	K	-	UniqueId
EpisodeItem SequenceNumber	This links the Consent Statement back to its Episode Item Content record.	K	-	SequenceNumber
EpisodeItemContentSeqNo	This links the Consent Statement back to its Episode Item Content record.	K	-	SequenceNumber
ConsentStartDate	The date when consent is granted	M	Y	Date
ConsentReviewDate	The date when consent is due for review. This is an optional field, but it is considered good practice to review (and renew) consent after an appropriate period. The consent does not necessarily "end" at the review date; it is simply a reminder to reconsider it.	O	Y	Date
ConsentMethod	The method by which consent was granted. Valid values are: • Written • Verbal • Electronic (eg email) It is of course safest to obtain written consent. However the process must not become bureaucratic, and in some circumstances verbal consent may be appropriate. This is a matter for practitioner judgement.	M	Y	Code
DocumentReference	If consent is "written" then it is possible to record a reference to a paper document. This may assist with finding it in local filing systems. (Whether physical or electronic)	O	Y	Document Reference
GrantedByChildFlag	This indicates if consent is granted by the child themselves. (Standard guidelines and professional judgement must be	M	Y	Yes/No

	used to decide if this is an appropriate choice)			
GrantedByRelationship SeqNo	If not the child, then the person who granted the consent. It is a matter for practitioner judgement to consider the people involved and select an appropriately qualified person to grant consent. (This should take into account, for example, the allocation of Parental Responsibility at the time, which is recorded on the ChildRelationship). The sequence number here identifies a Child Relationship – a suitable Service Provider or family member.	O	Y	SequenceNumber
CommentText	Special instructions about the consent statement. This may allow further complications and individual circumstances to be captured.	O	Y	ParagraphText

4.3.5 Consent Statement Entry

Description

This corresponds to a single line within the Consent Statement.

The CAF operates on a model of explicit consent. Only the parties explicitly listed here may have access to the data. This is based on the "team" of people with relationships to the child. It is recommended that when a Consent Statement is created it be automatically pre-populated with all of the "Service Provider" and "Service Request" relationships currently associated with the Episode. The consent statement should show the service type and organisation (if known), but not go down to the details of individual contact practitioners.

Relationships

Relationship Description	Cardinality	Notes
A Consent Statement Entry **belongs to** a Consent Statement	1 or more - 1	
A Consent Statement Entry **grants consent to** a Service Provider or Service Request	0 or more – 1	This gains agreement for relevant practitioners to look at the Episode data
A Consent Statement Entry **may be used to justify** any number of Access Control List entries	1 – 0 or more	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	This links the Consent Statement Entry back to its Consent Statement record	K	-	UniqueId
EpisodeItem	This links the Consent Statement Entry back to its Consent	K	-	SequenceNumber

SequenceNumber	Statement record.			
EpisodeItemContentSeqNo	This links the Consent Statement Entry back to its Consent Statement record.	K	-	SequenceNumber
ConsentEntry SequenceNumber	A sequence number to identify this Consent Statement Entry. There may be several Entries within an Consent Statement.	K	Y	SequenceNumber
GrantedToRelationship SeqNo	A sequence number to identify a Child Relationship who has consent to use the Episode data. The relationship must be of type “Service Provision” or “Service Request”. The consent statement should display the service type and organisation (if known), but not the contact practitioner - this is based on practitioner feedback that they do not operate alone, and so consent must apply to both themselves and colleagues. Note that this provides considerable flexibility to grant consent to whole agencies, and to large or small teams (both cross-agency and within an agency, or groups of agencies).	M	Y	SequenceNumber
ConsentFlag	A flag to indicate whether or not consent is granted to this service provider.	M	Y	Yes/No
CommentText	Further comments about this consent entry. This may include more detailed restrictions on the consent, or comments like “please ask me first”. If consent is refused then the comment text may be used to indicate the reasons why.	O	Y	CommentText

4.3.6 Action Plan

Description

The Action Plan addresses the “delivery” aspect of the CAF process. It is intended to be high-level and a “light touch” to provide some support for multi-agency action planning. It is NOT intended as a substitute for existing case-working systems, which will still be needed to co-ordinate the detailed execution.

Note that Action Plans are never updated, but are retained “as is” as a permanent record. A new Action Plan may be created at any time by copying and amending the current one.

Relationships

Relationship Description	Cardinality	Notes
An Action Plan **further defines** Episode Item Content	0 or 1 - 1	This is one of the possible subtypes of Episode Item Content.
An Action Plan **has** one or more Actions	1 – 1 or more	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	This links the Action Plan back to its Episode Item Content record	K	-	UniqueId
EpisodeItem SequenceNumber	This links the Action Plan back to its Episode Item Content record.	K	-	SequenceNumber
EpisodeItemContentSeqNo	This links the Action Plan back to its Episode Item Content record.	K	-	SequenceNumber
ReviewDate	A date when the plan should be reviewed.	M	Y	Date

ReviewCriteriaText	"How will you know when things have improved" text	O	Y	ParagraphText
ChildCommentText	Child comments about the action plan.	O	Y	ParagraphText
ParentCommentText	Parent comments about the action plan.	O	Y	ParagraphText
OtherCommentText	Any other notes or comments.	O	Y	ParagraphText

4.3.7 Action

Description

This represents a single Action within an Action Plan.

Actions are assigned to members of the Episode Team.

Relationships

Relationship Description	Cardinality	Notes
An Action **belongs to** an Action Plan	1 or more - 1	
An Action **is assigned to** a Child Relationship	0 or more – 1	This can be a person with any type of relationship to the child. (Family member, service provider, or requested service)

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	This links the Action back to its Action Plan record	K	-	UniqueId
EpisodeItem	This links the Action back to its Action Plan record	K	-	SequenceNumber

SequenceNumber				
EpisodeItemContentSeqNo	This links the Action back to its Action Plan record	K	-	SequenceNumber
ActionSequenceNumber	A sequence number to identify the Action within the Action Plan. An Action Plan can contain several Actions.	K	Y	SequenceNumber
ActionToChildFlag	A flag to indicate if this is an action for the child themselves to perform	M	Y	Yes/No
ActionToRelationshipSeqNo	A sequence number to identify a Child Relationship to perform the action. (Assuming not the child themselves – see above). Actions can be assigned to a person with any kind of relationship to the child – Service Providers, future requested services (Service Request), or family members (Personal Relationship).	O	Y	SequenceNumber
ActionText	Brief notes to explain the action.	M	Y	CommentText
TargetDate	A date when the action should be completed.	O	Y	Date

4.3.8 Progress Review

Description

The Progress Review form also addresses the “delivery” aspect of the CAF process. It is again high-level and a “light touch”. The aim is to provide a very simple record of the multi-agency review process.

Relationships

Relationship Description	Cardinality	Notes
A Progress Review **further defines** Episode Item Content	0 or 1 - 1	This is one of the possible subtypes of Episode Item Content.

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	This links the Progress Review back to its Episode Item Content record	K	-	UniqueId
EpisodeItem SequenceNumber	This links the Progress Review back to its Episode Item Content record.	K	-	SequenceNumber
EpisodeItemContentSeqNo	This links the Progress Review back to its Episode Item Content record.	K	-	SequenceNumber
ReviewText	Text notes that review the progress made.	M	Y	ParagraphText
ReassessmentFlag	Flag to indicate if a fresh Assessment is needed. Most Episodes will have just one Assessment at the beginning. However particularly complex and long-running Episodes may benefit from a basic re-assessment of the	M	Y	Yes/No

	child at periodic intervals. (This is a matter for local and practitioner discretion).			
ChildCommentText	Child comments about the Progress Review	O	Y	ParagraphText
ParentCommentText	Parent comments about the Progress Review	O	Y	ParagraphText
NextReviewDate	Date of the next review. The conclusion of the Progress Review may be to continue longer with the existing Action Plan. In that case then a new review date can be set here.	O	Y	Date
NextReviewCriteriaText	“How will you know when things have improved” text	O	Y	ParagraphText

4.3.9 Final Summary

Description

The Final Summary marks the end of the Episode. It corresponds to the child's transition back to mainstream service provision. It provides a chance to look back at the Episode and sum up with a few simple comments.

The Final Summary is also a natural point to capture Management Information and assess the outcomes of the Episode. A very simple indicator is provided to rate success. This may be used to collect simple statistics, and to drive further detailed sampling activities.

Relationships

Relationship Description	Cardinality	Notes
A Final Summary **further defines** Episode Item Content	0 or 1 - 1	This is one of the possible subtypes of Episode Item Content.

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EpisodeId	This links the Final Summary back to its Episode Item Content record	K	-	UniqueId
EpisodeItem SequenceNumber	This links the Final Summary back to its Episode Item Content record.	K	-	SequenceNumber
EpisodeItemContentSeqNo	This links the Final Summary back to its Episode Item Content record.	K	-	SequenceNumber
FinalCommentsText	Some final text notes to sum up the Episode.	O	Y	ParagraphText
ChildCommentText	Child comments about the Episode	O	Y	ParagraphText

SuccessRating	A simple rating to categorise the Episode, and describe the degree to which the child's needs have been met. Valid values are: • Highly successful • Partly successful • Largely unsuccessful • Totally unsuccessful	O	Y	Rating

4.4 Access and Audit

Information sharing is a major theme of eCAF, so Access and Consent are key issues.

An important point is that “Access” and “Consent” are not quite the same thing. “Consent” records the intentions and preferences of the data-owner regarding the information about themselves. These are then interpreted to provide “Access” to various system users.

For example, a child might agree Consent to “The Police”- but the Episode Coordinator would in fact use this Consent to grant Access to only one or two relevant police officers.

It is possible to gain “Access” without “Consent” – although this is not the norm, and subject to strict legal safeguards.

In the eCAF system Consent is at the Episode level, as is Access by default. (Although there is the possibility to override Access down to Episode Item level).

Consent is primarily based on the “team” of people with relationships to the child (Service Providers, and future “Requested” services). This makes it possible to provide a explicit and targeted list of those with a clear “need to know”. The Consent Statement is covered in section “3.3 Episode Items” and provides more details about this

The CAF is mainly intended for cases which fall below the Child Protection threshold, so there should be little need for Access without Consent. Neither should there be a common need for access by users that do not have a clear relationship with the child. (Indeed it is an explicit aim for the process to encourage collaberation and build trust with the family). However emergencies and problems may arise, so an “Additional Access” mechanism is provided to grant access in a controlled way to other system users and for other reasons.

Access is based on system user ids, using an Access Control List for the Episode. When access is granted, then it must be referenced back to a Consent Entry that provides a justification for that access. (In fact it may sometimes be possible to suggest additions to the Access Control List automatically from the Consent Entries).

The last part of the Access system is an Audit Log. This provides an audit trail of all system access, so that users may be held accountable for any inappropriate activities.

4.4.1 Access Control List Entry

Description

The Access Control List is the main mechanism for controlling access to the CAF data. Each Episode has an Access Control List to define who can access the Episode data.

It is envisaged that additions to the Access Control List might be automatically suggested based on the Consent Statements – pulling through the user and group ids of practitioners and organisations associated with the child. However it should also be available for direct maintenance, so that more complex manual adjustments can be made where necessary.

Relationships

Relationship Description	Cardinality	Notes
An Access Control List Entry **belongs to** an Episode.	0 or more - 1	
An Access Control List Entry **may be justified by** a Consent List Entry.	0 or more – 1	
An Access Control List Entry **may be justified by** an Additional Access decision.	0 or more – 1	
An Access Control List Entry **may provide justification for** an Access Log Entry.	1 – 0 or more	
An Access Control List Entry **grants access to** a System Principle.	0 or more - 1	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype

EpisodeId	This links the Access Control List Entry back to its Episode record	K	-	UniqueId
ACLSequenceNumber	A sequence number to identify this Access Control List entry. There may be many Access Control List entries for each episode.	K	Y	SequenceNumber
PrincipleSecurityDomainId	The security domain that the PrincipleId belongs to. (PrincipleIds only unique within a security domain – this allows for federated user management)	M	Y	Code
PrincipleId	A user or group who is being granted access to the Episode. ("PrincipleId" is a generic term covering "UserId" or "GroupId", as either may be used to grant access). (Exact analogy with file system permissions).	M	Y	PrincipleId
EpisodeAccessRights	Describes the rights that this user has to the Episode: **ReadOnly** – Only able to view the Episode information. This is the default **Update** – Also able to add and update Episode Items and Relationships. The Episode Coordinator may choose to grant this additional access to some other practitioners who are closely involved in the Episode. **FullControl** – Also able to maintain this Access Control List, and able to change the Episode Coordinator. This is intended mostly for the Episode Coordinator. The Coordinator might sometimes appoint a deputy to help manage access to the Episode, or to cover while they are away.	M	Y	Code
AccessStartDate	The date when access begins.	M	Y	Date
AccessEndDate	The date when access ceases.	O	Y	Date

ConsentEpisodeItem SequenceNumber	Reference to a Consent Statement that provides the justification for this access.	O (Either Consent Statement or Additional Access justification must be given)	Y	SequenceNumber
ConsentEntry SequenceNumber	Reference to a Consent Statement Entry that provides the justification for this access.	O (Either Consent Statement or Additional Access justification must be given)	Y	SequenceNumber
AdditionalAccessDecision SequenceNumber	Reference to an Additional Access Decision that provides the justification for this access.	O (Either Consent Statement or Additional Access justification must be given)	Y	SequenceNumber
EpisodeCoordinatorFlag	Indicates if this is the ACL Entry for the Episode Coordinator. The Episode Coordinator creates the Episode, and is thus a special case. They obviously have full Control access to the Episode without the need for Consent or Additional Access Decisions.	M	Y	Yes/No
CommentText	Further comments about the Access Control List Entry. For example, this may be used to further explain how the Consent has been interpreted to grant this access.	O	Y	CommentText

4.4.2 Additional Access Decision

Description

In most cases access should be for practitioners who are related to the child via a Service Provision, and explicitly approved in a Consent Statement.

However there may be occasions where this is not appropriate (for example if the Episode is now closed), and another practitioner separately agrees consent and wants access.

There may also be rare occasions where access is required without consent. This could be due to Child Protection issues. (Although the CAF is not designed primarily for these kind of cases).

In these situations an Additional Access Decision can be made to grant Access to a user without completing a new Consent Statement. This should be unusual, and manual governance processes must be put in place to check up on these cases.

Relationships

Relationship Description	Cardinality	Notes
An Additional Access Decision **belongs to** an Episode.	0 or more - 1	
An Additional Access Decision **may be used to justify** any number of Access Control List entries	1 - 0 or more	
An Access Control List Entry **agrees access for** a System Principle.	0 or more - 1	

Attributes

Attribute	Notes	Mand/Opt/ Key?	Extrnl?	Datatype

EpisodeId	This links the Additional Access Decision back to its Episode record	K	-	UniqueId
AdditionalAccessDecision SequenceNumber	A sequence number to identify this Additional Access Decision. There may be any number of Additional Access Decisions for each episode.	K	Y	SequenceNumber
DecisionDate	The date when the decision was made	M	Y	Date
PrincipleSecurityDomainId	The security domain that the PrincipleId belongs to. (PrincipleIds only unique within a security domain – this allows for federated user management)	M	Y	Code
PrincipleId	The system user (or group) requesting access	M	Y	PrincipleId
AccessAgreedFlag	A flag to show whether this access was agreed or not	M	Y	Yes/No
ReasonText	Text justification for the decision. (The reason should be recorded whether access is granted or not).	M	Y	ParagraphText
DpaSchedule2Justification	A code to identify which condition of the Data Protection Act (Schedule 2) justifies access to this data. Valid values are: • Subject has given consent to share information • Sharing information is necessary to protect the person's vital interests • To comply with a court order • To fulfil a legal duty • To perform a statutory function • To perform a public function in the public interest • To prevent or detect a crime	M	Y	Code
DpaSchedule3Justification	The CAF Assessment contains "sensitive" information, so further justification under the Data Protection Act (Schedule	M	Y	Code

	3) is needed. • Subject has given explicit consent to share information • Sharing information is necessary to establish, exercise or defend legal rights • Is necessary for the purpose of, or in connection with any legal proceedings • To protect someone's vital interests and the person to whom the information relates cannot consent, is unreasonably withholding consent, or consent cannot reasonably be obtained • To perform a statutory function • It is in the substantial public interest and necessary to prevent or detect a crime and consent would prejudice that purpose			
AuditInvestigationFlag	Indicates if this access is being granted to allow an auditor to investigate the case.	M	Y	Yes/No

4.4.3 Audit Log Entry

Description

All access is logged, down to the individual user and Episode Item level. This provides an audit trail which may be used to check for appropriate usage of the system. The log also covers events such as archiving of data, and viewing of the logs.

Relationships

Relationship Description	Cardinality	Notes
An Audit Log Entry may **refer to** other data at various levels of granularity: Episode, Episode Item.	0 or more - 1	
An Audit Log Entry **may be justified by** a Access Control List Entry.	0 or more – 1	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
AuditLogEntryId	Each log entry has a unique id. This is a uuid, thus allowing log entries to be uniquely generated and identified.	K	Y	UniqueId
EpisodeId	The Episode which the log entry refers to. (Optional as some actions in the log may not relate to a specific Episode)	O	Y	UniqueId
EpisodeVersionNumber	The version number of the Episode data. This could be useful to see exactly which version was viewed. (Optional as some actions in the log may not relate to a specific Episode)	O	Y	SequenceNumber

ItemSequenceNumber	The specific Episode Item which the log entry refers to. Again, this may not always be relevant.	O	Y	SequenceNumber
LogTimestamp	The date and time of the action	M	Y	Timestamp
PrincipleSecurityDomainId	The security domain that the user belongs to. (UserIds only unique within a security domain – this allows for federated user management)	M	Y	Code
UserId	The user involved in the action. This must always be an individually identifiable user, never a group.	M	Y	PrincipleId
AuditAction	The action that was performed. Valid values are: • **read** – viewing/accessing of Episode data • **archive** – the archiving of a data item • **viewlog** – viewing of the log entries for this Episode • **search** – performing a search for a child's Episode data • **export** – exporting a copy of an Episode • **import** – importing a copy of an Episode • **transfer out** – transferring an Episode out to another eCAF system • **transfer in** – transferring an Episode in from another eCAF system (Note that "ordinary" work on the Episode data is already fully audited by the Episode versioning scheme)	M	Y	Code
ACLSequenceNumber	If this action was allowed due to a specific Access Control List entry, then this provides a reference.	O	Y	SequenceNumber

AuditLogData	Any additional data relevant to this log entry. For example, for a search then the search parameters might be stored. For a transfer then the from and to systems might be stored.	O	Y	ParagraphText

4.5 System Administration

This section describes various administrative details of an eCAF system.

It provides a basic model for internal users and groups, and discusses some of the options for federated user management.

4.5.1 Security Domain

Description

A Security Domain is an administrative construct, responsible for administering a certain set of users.

An eCAF system will need to manage secure access for a wide range of practitioners from different organisations – therefore the intention is to provide flexible choices for user administration. Some of the anticipated options are::

1) Single internal security domain

   This is the simplest option, with all users being registered on the eCAF system, and provided with a new “eCAF” user id and credentials. While simple from an IT viewpoint, it requires a central “eCAF administrator” to register and keep up to date user details. It also requires practitioners to manage an additional user id and password/security token

2) Multiple internal security domains

   This is similar to (1), but administration is delegated with separate administrators being responsible for different groups of users. This might apply to, for example, a consortium approach – where several Local Authorities share a single eCAF system.

3) Federated external security domains

   In this option users are not set up within the eCAF system and instead user management is delegated out to the administrators of trusted external domains (eg Health, Social Services). The user logs on to their normal system and has the user id automatically passed through to eCAF via a single-sign-on mechanism. While more complex to achieve, this option provides the cleanest long term solution.

In practice a mixture of options is likely, with some users being registered locally on eCAF and others passing through from other systems using single-sign-on. The situation is likely to evolve over time as technical capabilities supporting Single Sign On mature. Throughout the data model, user ids are qualified by their Security Domain – thus allowing for this flexibility.

Relationships

Relationship Description	Cardinality	Notes
A Security Domain is **responsible for managing** a set of System Principles.	1 – 0 or more	The users and groups in that Security Domain

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
SecurityDomainIdCode	An Id to uniquely identify a trusted Security Domain.	K	Y	Code
SecurityDomainDescription	A description of the Security Domain	M	Y	DescriptionText
AdministratorName	The name of the Administrator responsible for this Security Domain	M	Y	PersonName Structure
AdministratorContactDetails	Contact details for the administrator	M	Y	ContactDetails Structure
RecordMetadata	Standard metadata about this record. For example, last update user and timestamp.	M	Y	RecordMetadata Structure

4.5.2 System Principle

Description

A System Principle is a generic term for “user or group”. It allows common behaviour to be modelled, and is useful in situations where either a user or a group can be used (eg granting permissions).

This table will only be populated for internal “eCAF Security Domain(s)”

Relationships

Relationship Description	Cardinality	Notes
A system principle **belongs to** a Region.	0 or more - 1	The users and groups in that region
A system principle **is further defined by** a user	1 – 0 or 1	A possible subtype of System Principle
A system principle **is further defined by** a group	1 – 0 or 1	A possible subtype of System Principle
A system principle **is granted access** on an Access Control List	1 – 0 or more	
A system principle **has access agreed** by an Additional Access Decision	1 – 0 or more	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
PrincipleSecurityDomainId	The security domain that this System Principle belongs to.	K	Y	Code
PrincipleId	The user or group id assigned by the local administrator	K	Y	PrincipleId
PrincipleStatus	The status of this user or group. This can be: • Live – in use	M	Y	Status

	• Closed – no longer in use			
PrincipleType	Either “user” or “group”	M	Y	Code
RecordMetadata	Standard metadata about this record. For example, last update user and timestamp.	M	Y	RecordMetadata Structure

4.5.3 User

Description

A user of the eCAF system. At present only approved practitioners can be users.

This table will only be populated for internal eCAF Security Domain(s)

Relationships

Relationship Description	Cardinality	Notes
A user **further defines** a System Principle.	0 or 1 - 1	A possible subtype of System Principle
A user may **belong to** any number of Group Memberships	1 – 0 or more	
A user may **be associated with** any number of practitioner records	1 – 0 or more	In real-life a user should only be associated with one practitioner (Although the possibility of "secretary" users remains). However, aside from this, there is no global database of practitioners and practitioner details are repeated for each Episode. So one user and one "real life" practitioner may be associated with many practitioner records for different Episodes.
A user may **have actions logged** by an Audit Log Entry	1 – 0 or more	Audit logging is always at the level of a specific individual user.

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
PrincipleSecurityDomainId	The security domain that this user belongs to.	K	Y	Code

UserId	The principle id to identify this user (as assigned by the local system administrator)	K	Y	PrincipleId
UserName	The users full name	M	Y	PersonName Structure
ContactDetails	Contact details for the user	M	Y	ContactDetails Structure
ContactAddressId	Address details for the user	O	Y	UniqueId

4.5.4 Group

Description

A group of eCAF system users. Can be used to assign practitioners to teams and thus simplify the granting of permissions

This table will only be populated for internal eCAF Security Domain(s)

Relationships

Relationship Description	Cardinality	Notes
A group **further defines** a System Principle.	0 or 1 - 1	A possible subtype of System Principle
A group may **be involved in** any number of Group Memberships	1 – 0 or more	
A group may **be associated with** any number of organisation records	1 – 0 or more	Groups can be used to model organisations (eg a hospital, or specific team). This allows permission to be simply granted to the whole group. As with practitioners, a single "real life" organisation may appear many times in the eCAF database, in the context of different Episode Histories.

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
PrincipleSecurityDomainId	The security domain that this group belongs to.	K	Y	Code
GroupId	The principle id to identify this group (as assigned by the local system administrator)	K	Y	PrincipleId
GroupDescription	A longer and more meaningful description of the group	M	Y	DescriptionText

4.5.5 Group membership

Description

A simple entity to model the many-to-many relationship between users and groups.

This table will only be populated for internal eCAF Security Domain(s)

Relationships

Relationship Description	Cardinality	Notes
A group membership **links to** a user	0 or more - 1	
A group membership **links to** a group	0 or more - 1	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
PrincipleSecurityDomainId	The security domain that these users and group belongs to.	K	Y	Code
GroupId	The group whose members are being defined	K	Y	PrincipleId
GroupMember SequenceNumber	An arbitrary sequence number to distinguish members of the group	K	Y	SequenceNumber
UserId	A user who is a member of this group	M	Y	PrincipleId
MembershipStartDate	Date when this member was added to the group	M	Y	Date
MembershipEndDate	Date when this member was removed from the group (Blank if membership still active)	O	Y	Date
RecordMetadata	Standard metadata about this record. For example, last update user and timestamp.	M	Y	RecordMetadata Structure

4.5.6 System Role

Description

This is a list of specialist roles that users may be assigned in the eCAF system. The list will contain preset values that link with specific system functionality – enabling and disabling certain features, affecting the appearance of the screens, and so on.

In a federated scenario then roles could theoretically be managed in the external system. However the vast majority of users will be in the default (practitioner) role. It is suggested that it would be easier to simply set up an internal "eCAF" user id for the small number of administrators.

Relationships

Relationship Description	Cardinality	Notes
A system role **is assigned to** selected users via a Role Membership	0 or more - 1	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
SystemRoleCode	A code to represent this role. Valid values are: • **Administrator** – a system administrator with additional access rights, ability to set up users etc • **Auditor** – a user with quality control and monitoring responsibilities • **Reporting** – a user who does reporting and statistics generation (but may not have access to detailed child	K	Y	Code

	information) • **Practitioner** – the default role, assumed if no other entries			
SystemRoleDescription	A text description of the role	K	Y	DescriptionText
RecordMetadata	Standard metadata about this record. For example, last update user and timestamp.	M	Y	RecordMetadata Structure

4.5.7 System Role membership

Description

A simple entity to model the many-to-many relationship between users and system roles.

Relationships

Relationship Description	Cardinality	Notes
A system role membership **links to** a user	0 or more - 1	
A system role membership **links to** a system role	0 or more - 1	

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
PrincipleSecurityDomainId	The security domain that the user belongs to.	K	Y	Code
UserId	The user who holds this System Role	K	Y	PrincipleId
SystemRole SequenceNumber	An arbitrary sequence number to distinguish this role. (A user may potentially hold several roles)	K	Y	SequenceNumber
SystemRoleCode	The System Role assigned to this user	M	Y	Code
SystemRoleStartDate	Date when this user was granted this System Role	M	Y	Date
SystemRoleEndDate	Date when this System Role was revoked (Blank if System Role still active)	O	Y	Date
RecordMetadata	Standard metadata about this record. For example, last update user and timestamp.	M	Y	RecordMetadata Structure

5. Type Definitions

This section defines the underlying data types refered to in the entity definitions

Various physical interpretations are possible, so the details here are for guidance only. They will need adapting to suit the Database Management System selected for implementation.

The XML Schema definitions should be refered to in conjunction with this section. Whatever the internal implementation details, the XML Schema definitions provide the definitive and detailed standard that must be supported for external data exchange.

5.1 Structures

Various common structures are used throughout the data model. These structures are defined here.

5.1.1 Person Name Structure

Description

A person's name in the GovTalk standard format.

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
Title	The person's title (eg "Prince")	O	Y	String 35
GivenName1	The first forename (eg "Charles")	O	Y	String 35
GivenName2	The second forename (eg "Louis")	O	Y	String 35
GivenName3	The third and any further forenames (eg "Mountbatton")	O	Y	String 35
FamilyName	The surname (eg "Windsor")	M	Y	String 35
Suffix1	A suffix (eg "BSc")	O	Y	String 35
Suffix2	A second suffix	O	Y	String 35
Suffix3	A third and any further suffixes	O	Y	String 35
RequestedName	The name by which the person likes to be known. (eg "Prince Charles")	O	Y	String 70
FamilyNameFirstFlag	Flag to indicate if this person prefers their family name to be quoted first. (This is common practice in some cultures). This flag is not part of the GovTalk standard, but is included for compatibility with the IS Index data model.	M	Y	Yes/No

5.1.2 Record Metadata Structure

Description

A set of basic metadata information that is added to every record.

Attributes

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
LastUpdatedPrincipleSecurity DomainId	The security domain that the user belongs to. (UserIds only unique within a security domain – this allows for federated user management)	M	Y	Code
LastUpdatedUserId	Audit trail of the individual who last updated this record. This is particularly important for the eCAF system, as some practitioners may not have system access. Therefore data will be entered on their behalf. This metadata records the actual logged on system user, as opposed to (for example) the real-life author of an assessment.	M	Y	UserId
LastUpdatedTimestamp	Audit trail of when the last update was done.	M	Y	Timestamp

5.1.3 Contact Details Structure

Description

This contains various ways of getting in touch with people. It is based on the GovTalk standard formats

Email

A single “preferred” email address for the purposes of CAF communications.

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
EmailAddress	The email address.	M	Y	As per GovTalk
WorkHome	Flag to indicate if this is a work or home email address	O	Y	As per GovTalk

Fax

A single “preferred” fax number for the purposes of CAF communications.

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
CountryCode	The country code	O	Y	As per GovTalk
NationalNumber	The national telephone number	M	Y	As per GovTalk
Extension	Extension number	O	Y	As per GovTalk
WorkHome	Flag to indicate if this is a work or home number	O	Y	As per GovTalk
MobileFlag	Flag to indicate if this is a mobile number	O	Y	As per GovTalk

TelephoneListEntry

Up to four telephone numbers. (This covers the available combinations of Work/Home and Fixed/Mobile).

Attribute	Notes	Mand/ Opt/ Key?	Extrnl?	Datatype
CountryCode	The country code	O	Y	As per GovTalk
NationalNumber	The national telephone number	M	Y	As per GovTalk
Extension	Extension number	O	Y	As per GovTalk
WorkHome	Flag to indicate if this is a work or home number	O	Y	As per GovTalk
MobileFlag	Flag to indicate if this is a mobile number	O	Y	Yes/No
PreferedFlag	Flag to indicate which of the phone numbers is the preferred one to use	O	Y	Yes/No

5.2 Basic types

This section defines the basic types used throughout the data model. These would need interpreting into physical data-types for a concrete implementation.

Type	Description
Code	A code used to classify something to the system. For example; an observation type, a gender, or an episode item type.
CommentText	A brief sentence or two to comment on something. (255 characters suggested).
Date	A date
DescriptionText	A description. Typically this provides a text description of a Code. (255 characters suggested).
DocumentReference	A reference to a paper document in a local filing system.
Free	Implementation dependant. Various local data-items are suggested which do not feature in the external XML standard. It is therefore a completely free choice as to the best way to implement these.
OrganisationName	The name of an organisation. (Simple string, as defined on GovTalk)
ParagraphText	A paragraph of text. For example, this is used for the major sections of the assessment form. It should allow the user plenty of space to say what they want and, within reason, they should not be constrained by system limitations. (5000 characters suggested).
Rating	A rating or score, on a 4 point scale.
RegCharityNumber	A registered charity number, used to identify an organisation.
SequenceNumber	A monotonically increasing positive integer, used to arbitrarily identify records in the system.
Status	A status code. This will hold values like “Draft”, “Live”, “Closed”, “Deleted”.
PrincipleId	A user of the system. This is defined in the broadest sense and may include individual users and groups.
Timestamp	A date and time stamp.
UniqueIdentifier	A unique identifier, also known as a guid, and used for internal record identification purposes. A guid looks like this: 01f9d080-30d4-11da-8cd6-0800200c9a66 A significant feature of guids is that all computer systems can generate them, and that they are guaranteed globally unique. So if two computers on opposite sides of the world generate guids

	independently then there will never be an overlap. This makes them ideal for internal use to clearly identify things within the system.
VatNumber	A VAT number, used to identify an organisation. As defined on GovTalk.
Yes/No	A Boolean yes/no flag.