IBM Cúram Social Program Management
Version 7.0.2

Evidence Broker

IBM

Note

Before using this information and the product it supports, read the information in "Notices" on page 48

Edition

This edition applies to IBM® Cúram Social Program Management v7.0.2 and to all subsequent releases unless otherwise indicated in new editions.

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Chapter 1. Evidence Broker

The IBM Cúram Social Program Management evidence broker mediates the sharing of evidence between cases in an agency. According to an agency's needs, administrators can create sharing configurations based on case and evidence types. Flexible sharing configuration options enable administrators to configure exactly what evidence information is shared between cases. Administrators can also configure whether caseworkers need to manually review evidence that is shared to particular cases. Another objective of the evidence broker is to enable caseworkers to spend less time on administering evidence and to focus on resolving genuine conflicts that occur during evidence sharing.

Why does evidence need to be shared between cases

Agencies widely adopt the principle of evidence sharing to enable information to be shared and processed more efficiently. When a client is registered for a program with an agency, for example, a program that provides financial assistance toward the cost of medical treatment, evidence information is stored about the client in an associated case. When clients avail of multiple programs through an agency, clients can be added to multiple cases. Clients do not want to be required to submit the same information multiple times for themselves and their family members. Also, when client evidence changes, such as a change in address, the evidence change must be communicated to all cases that a client is registered on.

The evidence broker also caters for scenarios where agencies may maintain evidence that is similar but that is structured or formatted differently, with slight content variations. For example, different case types can require additional information for particular evidence types compared to other cases, such as the requirements for identifications evidence. Also, different cases might not record information in identical formats. The IBM Cúram Social Program Management evidence broker is a solution that can be configured to comply with the different needs and concerns of agencies.

Note: To view the documentation for the previous version of the evidence broker, see IBM Cúram Social Program Management version 7.0.1 Evidence Broker documentation.

Evidence sharing between cases

An administrator can create multiple sharing configurations that each specify what evidence is shared between a source case and a target case, where the broker can share both identical evidence and logically equivalent evidence. The configuration also specifies whether the evidence is shared seamlessly, or whether a caseworker must manually review and process the evidence.

The evidence broker recognizes that evidence can be shared at various stages in its lifecycle; for example, evidence can be new, updated, merged, or removed. The evidence broker provides the necessary business validations to preserve the integrity of the evidence flow on both the source and target cases. The following list outlines the main features of the evidence broker, which are described in more detail in subsequent topics:

Share new, updated, and removed evidence
The evidence broker shares evidence records between source and target cases. For example, income evidence from application cases can be shared to integrated cases. For systems that are configured to use person or prospect person evidence, the evidence broker can be configured to share this evidence in addition to case evidence.

Evidence sharing is unidirectional and per evidence type
The evidence broker shares evidence based on the sharing configuration for each specific evidence type. The sharing configuration also provides the ability to determine which case types that evidence can be shared from and to. If bidirectional sharing between case types is required, an administrator must create a separate sharing configuration for each direction. For example, an agency might decide to configure the sharing of address information from source integrated cases that manage income support programs to target child welfare integrated cases. However, an agency might decide not to configure the sharing of the address information in the other direction from child welfare integrated

cases to income support integrated cases. Therefore, with such a configuration, the addition of a new address or an update to an existing address on a child welfare integrated case would not be shared to an associated income support integrated case. However, if a caseworker adds or updates an address on an income support integrated case, it would be shared to an associated child welfare case.

Sharing of trusted source evidence
Evidence sharing configuration includes the ability to indicate if an evidence type on a particular case type is from a trusted source. When the broker shares evidence from a source that is trusted, it is automatically applied to the target case and activated without the need for user intervention. The broker applies a matching process to determine whether an evidence record should be shared between cases within a particular sharing configuration. However, if the broker cannot identify an exact match, a caseworker is required to intervene and resolve any genuine discrepancies.

Manual processing of evidence
If evidence is not configured as coming from a trusted source, or if a conflict occurs as described previously, the broker adds the records to a caseworker's incoming list for manual review and processing. Caseworkers can compare incoming evidence from different sources to existing evidence and make an informed decision about how to process the evidence.

Sharing identical and logically equivalent evidence
The evidence broker recognizes the difference between sharing identical evidence and logically equivalent evidence. When the broker shares evidence between source and target evidence records whose structure is identical, the evidence records are referred to as identical evidence. When the broker shares evidence between source and target evidence records whose structure is not identical, the evidence records are referred to as logically equivalent evidence.

Sharing evidence verifications
In a sharing configuration, an administrator can specify whether or not verifications are shared with evidence. If an administrator enables the sharing of verifications, the administrator can configure the broker to always share associated verification items, or only if they are used or required by the target case. An advantage of sharing verification items is that if the evidence verification requirements are the same between the source case and the target case, it is not necessary for the caseworker to reverify shared evidence that is already verified for the client.

Set of shared evidence data

For each evidence record that is created or updated, the evidence broker evaluates the evidence within the context of a wider set of evidence. Therefore, by applying data matching algorithms to a wider set of contextual data, the broker can more accurately match each shared evidence record between the source and target cases. The broker can then determine whether an evidence record should be shared to another case. If the broker does present evidence to a caseworker for manual intervention, the data is presented within the context of a wider set of data. The wider context helps the caseworker to make decisions about how to proceed with the incoming evidence without the need to navigate to other views, either on the same case or elsewhere on the system.

The set of evidence data that the broker shares between cases represents all the relevant information that pertains to a type of evidence, such as income. The set of evidence data includes changes made to evidence data of that type over the lifetime of a case. For example, for a client's income evidence, the client's income amount might be increased or reduced at times throughout the lifetime of the case.

Definition of a set of shared data

To summarize, a set of shared evidence data comprises the following items:

- An active evidence record of a particular type with all its attributes and values.
- The changes that are made to an active evidence record over time:
  - A caseworker can modify an evidence record and enter a new effective date that reflects the date of the change. This type of change is referred to as a succession.
  - A caseworker can correct an evidence record and not enter a new effective date. This type of change is referred to as a correction.

- Any related evidence records that are linked by a parent-child relationship in a hierarchy, including multiple instances of records at any level in the hierarchy.
- The members and participants that are listed on the evidence records that are contained within the evidence data set.

An evidence data set does not comprise the following items:

- In-edit and superseded evidence records; however, in some scenarios the broker might need to compare a shared evidence record to an in-edit record or a superseded record to determine whether the shared record matches a previous version of an active record on the target case.
- Deleted evidence records; the deletion of evidence records is shared, but the broker does not compare deleted evidence records when it applies the data matching process to other shared evidence records.
- Verifications. An administrator must specify within each sharing configuration whether verifications are shared with associated shared evidence records. Then, if verifications are shared, the system adds them to the target case after the evidence record is added.

Period covered by a set of shared data

The period that is covered by a set of shared data is referred to as the period of interest. The period of interest is defined to ensure that the broker shares sufficient historical evidence to enable eligibility and entitlement for all programs to be determined, including backdated or retrospective programs, Likewise, the broker does not share evidence that is redundant because it is too old, and therefore is no longer relevant.

Because retroactive medical assistance programs require evidence for a 15 month period before the program start date, the period that is of interest to a target case in relation to a shared evidence data sets begins 15 months before the case start date. The period of interest continues until the last evidence record in the succession is end-dated. If any evidence records within an evidence data set from a source case overlap, either partially or wholly, with the period of interest for a target case, the broker shares all the succession, correction, and in-edit evidence records within the evidence data set to the target case. Therefore, to maintain data integrity, the broker shares even those evidence records from the evidence data set whose history dates back to significantly before the start of the period of interest. Conversely, if no evidence records within an evidence data set from a source case overlap at all with the period of interest for a target case, the broker does not share any evidence records from the data set to the target case.

Sample scenario to show how the broker considers evidence for sharing

John Smith started his employment at the Beach Hotel in 2008. John Smith contacts an agency in 2011 to apply for food assistance. A caseworker creates a food assistance case, and records John Smith's employer in employment evidence, and records the income from the employment in earnings evidence. The employment evidence is a parent to the child earnings evidence. The evidence data set includes John Smith's income record for the Beach Hotel in the context of the food assistance case. As time passes, John Smith's income from the employer recorded on the case changes every month and the evidence is updated each time with a new income amount and the effective date on which the income changed.

When John Smith contacts the agency again in 2013 to apply for medical assistance, the caseworker creates another case and again records John Smith's employer and income for the Beach Hotel as parent employment and child earnings evidence on the medical assistance case. The set of evidence that is recorded on the new medical assistance case is separate from the set of evidence that is recorded on the food assistance case. Therefore, two sets of evidence data now represent John Smith's employment and earnings, one on each case.

When the caseworker activates the employment and earnings evidence on the new medical assistance case, the broker shares the evidence to the food assistance case. The employment and earnings evidence are shared as one set of evidence data because both the parent and child evidence records are included within the same set of evidence data. The evidence is synchronized with the Beach Hotel employment and earnings evidence that already exists on the food assistance case.

Examples to show how the broker considers evidence data for sharing

The following examples refer to evidence that is provided in the IBM Cúram Income Support and IBM Cúram Income Support for Medical Assistance applications. The examples show how evidence records are included in sets of evidence data.

Child evidence record with multiple parent evidence records

A caseworker adds a parent alien sponsor evidence record and a parent alien evidence record to a case. The caseworker also adds a child alien sponsorship evidence record to the case. An alien evidence data set is created that contains all the following related parent and child evidence records for the case:

- The alien sponsor evidence record
- The alien evidence record
- The alien sponsorship evidence record

A caseworker adds two parent tax filing status evidence records to a case. The caseworker also adds a child tax relationship evidence record to the case. A tax filing status evidence data set is created that contains all the following related parent and child evidence records for the case:

- The two tax filing status evidence records
- The tax relationship evidence record

Evidence records within and outside a case's period of interest

A client has been receiving food assistance from an agency for two years. Employment 1 with associated income 1, and employment 2 with associated income 2, are recorded against the food assistance case. The client contacts the same agency to apply for medical assistance. However, because employment 1 ended two years ago, the associated data is outside the period of interest of 15 months and the broker shares only the data associated with employment 2 to the medical assistance case. The medical assistance evidence data set contains the following related parent and child evidence records:

- The parent employment evidence record for employment 2
- The child earnings evidence record for employment 2

Parent evidence record with multiple child evidence records

A caseworker adds a parent medical expense evidence record to a case. The caseworker also adds child medical expense payments and spend-down medical expense evidence records to the case. Then, the caseworker adds a second, unassociated, parent unearned income evidence record to the case. A medical expense evidence data set is created that contains all the following related parent and child evidence records for the case:

- The parent medical expense evidence record
- The child medical expense payments and spend-down medical expense evidence records
- The second, unassociated, parent unearned income evidence record
- Child medical expense payments and spend-down medical expense evidence records related to the second parent unearned income evidence record

Parent evidence record with child and grandchild evidence records

A caseworker adds a parent income evidence record to a case. The caseworker also adds a child employer-sponsored coverage record to the case. Then, the caseworker adds a grandchild covered member record to the case. An income evidence data set is created that contains all the following related parent, child, and grandchild evidence records for the case:

- The parent income evidence record
- The child employer-sponsored coverage evidence record
- The grandchild covered member evidence record

Evidence records and data matching

When the insertion, removal, or modification of an evidence record is shared from a source case to a target case, the broker applies data matching to determine whether the evidence record matches any records that are already on the case. Depending on whether an exact match is identified, the broker can determine that the evidence record should be inserted onto, modified on, or removed from the target case.

Data matching process

When an evidence record is shared from a source case to a target case, the broker applies data matching to determine whether the evidence record matches any records that are already on the case. Then, according to the defined sharing configuration, the broker then either shares the evidence record shares the evidence record to the target case without caseworker intervention, or refers it to a caseworker for manual review and processing. Whatever action the broker determines is appropriate for the shared evidence record, the broker must adhere to the evidence maintenance patterns and evidence sharing rules, as described in subsequent topics.

When the broker applies data matching to compare a shared evidence record from a source case to an evidence record on a target case, the broker compares all attributes in the match, with the following exceptions:

- The `Comments` attribute
- The `Updated On` and `Updated By` system attributes

An identical match occurs when the values of all the compared attributes are the same, including the effective date on the evidence descriptor.

A case can have sets of evidence data that include evidence records of either a single evidence type, or multiple evidence types, where each evidence data set is in scope for sharing to a target case through a sharing configuration. Multiple evidence types might occur as a consequence of parent, child, and grandchild relationships. The evidence broker compares superseded and active records that are included in the incoming evidence record's shared data set to evidence records of the same evidence type that are on the target case.

The broker applies a series of steps as part of its data matching process to determine whether the incoming evidence exists on the case. Consequently, the broker recommends one of the following actions:

Insertion of an evidence record
By applying the data matching process, the evidence broker establishes whether the target case already has the shared evidence. If the evidence does not exist on the target case, the broker recommends the insertion of the evidence record onto the target case.

Removal of an evidence record
Where the broker shares the removal of an evidence record, and the evidence broker has established by applying the data matching process that the evidence record exists on the target case, the broker recommends the removal of the evidence record.

Modified evidence record
As a result of applying the data matching process, the evidence broker can establish that the target case had the evidence prior to its modification, and therefore the broker can recommend that the incoming modified evidence is applied to the target case.

Sharing records from multiple sources

An administrator can create a sharing configuration to share evidence records from multiple source cases to a single target case. Therefore, if a person is a member of multiple cases, the broker shares the evidence records from multiple locations to a single case for a caseworker. The broker must perform some extra comparisons to ensure that duplicates and conflicts do not occur. For example, the broker shares evidence records from two source cases, case 1 and case 2, to a single target case:

The broker uses the latest version of evidence
    If an evidence record on case 2 is a later version of an evidence record that is also on case 1, only the latest version of the evidence record from case 2 is shared to the target case.

The broker prevents duplicate evidence
    If an evidence record on case 1 is the same version of an evidence record that is also on case 2, the broker detects that the records duplicate each other and shares the evidence record from only one of the source cases to the target case.

The broker processes identical evidence before logically equivalent evidence
    If the broker shares an identical evidence type record from case 1, and a logically equivalent evidence type record from case 2, the broker process the record from case 1 first. Because all attributes are mapped between identical evidence types, while only a subset of attributes might be mapped between logically equivalent evidence types, the broker processes identical evidence first to ensure that as much data as possible is shared to the target case. For example, both Income Support and Health Care Reform relationship evidence types have a primary caretaker attribute that does not exist in person level relationship evidence types. Therefore, if a caseworker adds a client to Income Support case 1 and then adds the client to Income Support case 2, the broker first processes the shared identical evidence from Income Support case 1, which ensures that the primary caretaker information is shared to case 2. Then, any shared duplicate logically equivalent evidence is filtered out, while it has been ensured that no information is lost.

Evidence records that require manual intervention

When the broker shares evidence from a trusted source, the broker uses the data matching process to identify evidence records to be shared and therefore to reduce the necessity for a caseworker to intervene. However, in some circumstances the broker will not attempt automatic resolution and will instead present the evidence to the caseworker for assessment so that the evidence can be resolved correctly. The broker will present evidence that requires caseworker review and processing in the following circumstances:

- The evidence type of the evidence record that is being shared is not specified as a trusted source in the sharing configuration.
- The broker cannot identify an exact match between the incoming evidence record and the existing evidence records on the target case.
- The parent and child evidence types have a conflicting sharing configuration, as shown in the following scenarios:

    Insertion or modification of parent and child evidence records
        The broker shares the insertion or modification of a parent or child evidence record, where discrepancies exist between the parent and child evidence type sharing configurations; for example, the parent evidence type is configured as a trusted source, while the child evidence type is not configured as a trusted source. The broker adds the record to the caseworker's incoming list.

    Removal of parent and child evidence records
        The broker shares the removal of both a parent record and a child record to a target case, where the parent record can be removed automatically, but a caseworker must review the child record. The evidence broker adds both records to the caseworker's incoming list.

    Removal of parent evidence record causes orphaned child evidence record
        The broker shares the removal of a parent record to a target case. If the removal of the parent record on the target case causes the child record on the target case to be orphaned with no parent, the evidence broker adds the parent record to the caseworker's incoming list.

Data matching examples

The following examples outline how the evidence broker applies data matching to shared evidence records.

Data matching identifies identical match

An administrator has set up a sharing configuration to share from person evidence to integrated cases for the address evidence type. The address evidence type is configured as a trusted source on the target case. A caseworker adds the client John Smith to an integrated case. The following sets of address evidence data exist for John Smith:

- On John Smith's person evidence, an address evidence record records John's private address as 1 Main Street, Utah.
- On John Smith's integrated case, an address evidence record also records John's private address as 1 Main Street, Utah.

The caseworker applies a correction to modify the address details on John Smith's person evidence from 1 to 2 Main Street, Utah. The broker seamlessly shares the corrected address evidence record from the source person evidence to the target integrated case.

Data matching does not identify an identical match

An administrator has set up a sharing configuration to share from integrated cases to integrated cases for the address evidence type. The address evidence type is configured as a trusted source on the target case. A caseworker adds the client John Smith to integrated case 1, and then also adds John to integrated case 2. The following sets of address evidence data exist for John Smith:

- On integrated case 1, an address evidence record records John's private address as 1 Private Street, Utah.
- On integrated case 2, an address evidence record records John's mailing address as 1 Main Street, Utah.

A caseworker applies a correction to modify the private address details on integrated case 1 from 1 to 2 Private Street, Utah. The broker shares the corrected address evidence from the source integrated case 1 to the target integrated case 2. However, because the address is not identified as an identical match, the broker places the modified address evidence record into the caseworker's incoming evidence list for manual review and processing.

The following examples refer to evidence that is provided in the IBM Cúram Income Support and IBM Cúram Income Support for Medical Assistance applications.

Data matching identifies multiple versions of an evidence record

An administrator has set up a sharing configuration to share from Insurance Affordability integrated cases to Insurance Affordability integrated cases for the enrollment, enrolled member and enrolled plan evidence types. The evidence types are configured as trusted sources on the target case. A caseworker adds the client John Smith as a member on Insurance Affordability integrated case 1, and then also adds John Smith as a member on Insurance Affordability integrated case 2. The following sets of evidence data exist:

- On Insurance Affordability integrated case 1, enrollment, enrolled member, and enrolled plan evidence records are activated on the case.
- The broker shares the enrollment, enrolled member, and enrolled plan evidence records from Insurance Affordability integrated case 1 to Insurance Affordability integrated case 2.

A caseworker updates the coverage start date in the enrollment evidence record on insurance affordability integrated case 2. The enrollment evidence records on Insurance Affordability integrated cases 1 and 2 are now identical except for the updated coverage start date.

A caseworker then creates a new Insurance Affordability integrated case 3 for a different person. When the caseworker also adds John Smith as a case member on case 3, the broker is triggered to share John Smith's records from case 1 and 2 to the new case 3. The broker compares the two versions of the enrollment evidence records on case 1 and case 2, and establishes that they are identical except for the coverage start date on the enrollment evidence. Therefore, the broker seamlessly shares the latest version of the evidence from case 2 to case 3.

Data matching identifies duplicate versions of an evidence record

An administrator has set up a sharing configuration to share from Insurance Affordability integrated cases to Insurance Affordability integrated cases for the tax filing status evidence type. The tax filing status evidence type is configured as a trusted source on the target case. The following cases are created:

- James submits an application through the citizen portal. A caseworker authorizes the application and creates Insurance Affordability integrated case 1. The caseworker populates the tax filing status evidence on case 1.
- The caseworker creates Insurance Affordability integrated case 2 for James and populates the tax filing status evidence with the same value as on case 1.
- The caseworker adds Linda as a primary client on Insurance Affordability integrated case 3.

When the caseworker also adds James as a case member to case 3, the broker is triggered to share John's evidence records from case 1 and 2 to case 3. The broker seamlessly shares the tax filing status evidence without creating any duplicate records on case 3.

However, consider that the caseworker populates the tax filing status evidence for James on case 2 with a different value compared to case 1. When the caseworker also adds James as a case member to case 3, the broker identifies that the tax filing status evidence attributes do not match on case 1 and case 2. Therefore, the broker places the two tax filing status evidence records from case 1 and case 2 into the caseworker's incoming evidence list for manual review and processing.

Evidence maintenance patterns

An evidence maintenance pattern enforces a set of evidence maintenance restrictions and behavior on evidence sharing that determines how an evidence type is instantiated, corrected, and succeeded. If a caseworker maintains evidence manually in the application, the same evidence maintenance restrictions and behavior are enforced through evidence validations. By applying an evidence pattern to each evidence type, an agency can ensure that evidence of a particular type is shared across cases according to a consistent set of rules.

The default evidence maintenance pattern is multiple over time. It is applied to each evidence type unless an administrator configures an alternative evidence maintenance pattern. Administrators configure the evidence maintenance pattern for each evidence type individually, where they can choose from the following evidence maintenance patterns:

Multiple over time

The multiple over time pattern defines evidence types that can have multiple active instances, concurrent or otherwise, and allows successions to the instances. Evidence types that the multiple over time pattern is applied to can change over time; for example, a person might have multiple jobs at the same time, for which the person can receive salary increases.

The multiple over time evidence maintenance pattern applies the following rules to evidence types on which it is applied:

- It is possible to have multiple instances of the evidence type on a case at the same time, for the same period.
- The evidence instances can be corrected.
- The evidence instances can be succeeded.

Multiple

The multiple pattern defines evidence types that can have multiple active instances, concurrent or otherwise, and prevents successions to the instances. Evidence types that the multiple pattern is applied to do not change over time; for example, addresses. A person might have multiple addresses at the same time; for example, a child who has separated parents can have multiple private addresses, or a person can have both a private address and a mailing address. If a person stops living at or using an address and moves to another address, the address record is not succeeded. Instead, the address record is end-dated and a new address record is created that represents the physical move.

The multiple evidence maintenance pattern applies the following rules to evidence types on which it is applied:

- It is possible to have multiple instances of the evidence type on a case at the same time, for the same period.
- The evidence instances can be corrected.
- The evidence instances cannot be succeeded.

Single

The single pattern defines evidence types that can have only one active instance of the same type for a case member on the case, and prevents any successions to the instance. Evidence types that the single pattern might be applied to do not change over time; for example, birth and death details.

Because only one person can be included in person evidence, a caseworker can add only one instance of a single pattern evidence type to person evidence; for example, birth and death details. However, an integrated case can have multiple case members. Therefore, a caseworker can add one instance of a single pattern evidence type per case member to an integrated case; for example, one set of birth and death details per case member.

The single evidence maintenance pattern applies the following rules to evidence types on which it is applied:

- It is possible to have only one instance of the evidence type for a case member on a case.
- The evidence instance can be corrected.
- The evidence instance cannot be succeeded.

Single over time

The single over time pattern defines evidence types that can have only one active instance during a particular period in the case lifecycle for a case member, and allows successions to the instance. Evidence types that the single pattern might be applied to can change over time; for example, gender.

Because only one person can be included in person evidence, a caseworker can add only one instance of a single over time pattern evidence type to person evidence. However, an integrated case can have multiple case members. Therefore, a caseworker can add one instance of a single pattern evidence type per case member to an integrated case.

The single over time evidence maintenance pattern applies the following rules to evidence types on which it is applied:

- It is possible to have only one instance of the evidence type on a case at any particular time in the case lifecycle for a case member.
- Multiple evidence instances for the same period cannot exist.
- The evidence instance can be corrected.
- The evidence instance can be succeeded.

Related tasks

Configuring evidence patterns

An evidence maintenance pattern is a set of rules and characteristics that you can apply to an evidence type. You can designate how to instantiate, correct, and succeed that evidence type. You can apply one evidence maintenance pattern to each evidence type.

Evidence sharing rules

The evidence broker must share evidence from a source case to a target case in accordance with the sharing configurations and evidence maintenance patterns that an administrator defines. Also, to maintain data privacy and to avoid sharing data with third parties unnecessarily, the broker must adhere to the evidence business rules.

The evidence broker can either share records automatically to the target case without caseworker review, or add the records to a caseworker's incoming list for manual review and processing. When the broker

shares and resolves records without caseworker intervention, the system automatically activates the changed evidence on the target case so that reassessment occurs. Caseworkers can view the changed evidence in the active evidence list page.

When it shares evidence records between cases, the evidence broker complies with the rules that are outlined in the following sections. Some additional rules apply also to the sharing of logically equivalent evidence. For more information, see the *Identical and logically equivalent evidence* section.

Evidence is shared only through a defined sharing configuration

Evidence is shared between two case types only when a sharing configuration exists that defines the evidence types to be shared between the cases. An administrator creates a sharing configuration by using the sharing configuration wizard.

Evidence is shared only between open cases

The evidence broker shares evidence records only between open cases, including the insertion, modification, and removal of evidence records. Cases that have a status of either closed or canceled are considered to be closed. All other cases, including those that have a status of pending closure, are considered to be open.

For example, two open integrated cases A and B share income evidence records through a sharing configuration. A caseworker inserts an income record onto case A that the broker shares to case B. After case B is closed, the caseworker removes the income record from case A. However, because case B is now closed, the broker does not share the income record removal to case B, and therefore the income record is not removed from case B.

Identical evidence is shared to all directly and indirectly linked cases

In an identical evidence sharing configuration, evidence records are shared from a source case to all target cases that are linked directly and indirectly by configuration to the source case. For example, the broker shares the phone number evidence type from person A's evidence to integrated case B through a sharing configuration. Integrated case B also shares the phone number evidence type with income support integrated case C through another sharing configuration. If a caseworker inserts a phone number onto person A's evidence, the evidence broker shares the phone number evidence record from person A's evidence to integrated case B and to income support integrated case C.

Logically equivalent evidence sharing configurations do not support indirect evidence sharing

The broker does not support the sharing of logically equivalent evidence through indirect sharing configurations. An administrator must explicitly specify a logically equivalent sharing configuration between two cases for evidence to be shared between them. For example, the broker shares evidence between the following cases through logically equivalent sharing configurations:

- The broker shares person A email address evidence to integrated case B contact details evidence.
- The broker shares integrated case B contact details evidence to income support integrated case C address evidence.

If an email address is activated for person A, the broker shares the email address from person A to integrated case B. The broker also attempts to share the evidence to integrated case C. However, the sharing would fail because a direct logically equivalent sharing configuration does not exist between person A evidence and integrated case C evidence. For the broker to share the email address evidence to integrated case C, an administrator must specify a logically equivalent sharing configuration that shares email address evidence person A to contact details evidence on integrated case C.

All active records are shared

All active evidence records are shared, from the first active record on the business start date to later successions. If a succession occurs to an evidence record, any succession records whose status is active are shared to target cases. The broker also shares the deletion of active records.

Evidence records that have a superseded status because they have been corrected are not shared to target cases. Also, in-edit status records that are associated with active evidence records are not shared.

Shared evidence type must exist on the target case

An administrator can configure the evidence types that are associated with each type of case. When an administrator creates a sharing configuration and selects evidence types to be shared between two case types, the administrator can select only evidence types that exist on both cases.

Evidence is shared automatically only for trusted sources

When an administrator creates a sharing configuration between a source case and a target case, the administrator can specify whether the source case is a trusted source. Only evidence records from trusted sources are shared seamlessly to target cases without intervention from a caseworker. A caseworker must manually review and process evidence that is received from a source that is not specified as trusted.

Evidence type rules apply to sharing evidence between participants

A case can have one or more participants, where at least one of the participants is a member of the case. An administrator can configure evidence types on a case to apply either to members and other participants, or only to one or more specific members. To ensure that data privacy is maintained and that data is not unnecessarily shared with third-party agencies, the evidence broker must adhere to the rules that are configured for evidence types.

Evidence record applies to all types of case participant

An administrator can configure an evidence type that specifies that only the main participant must be either a primary client or a case member; other participants can be a case member, a registered person, or an unregistered person. For an evidence record of such an evidence type to be shared successfully, it is not necessary that each person that the evidence record applies to is a member of the target case. Therefore, if the evidence record contains multiple participants, only the main participant on the source evidence must exist as an active member on the target case for the evidence record to be shared successfully.

Evidence type applies only to case members

An administrator can configure an evidence type that specifies that all participants must be members on the case. For an evidence record of such an evidence type to be shared successfully, each person that the evidence record applies to must be either a primary client or a case member on both the source and the target cases. Therefore, if the evidence record contains multiple participants who must all be members, all participants must exist as active members on the target case for the evidence record to be shared successfully. If one member who is on the source case does not exist on the target case, the evidence record is not be shared to the target case.

Case members active period must overlap on source and target cases

The broker shares an evidence record only if a person exists as either a primary client or a case member on the target case for a period that at least partially overlaps with the shared evidence record. If the person is not an active member of the target case for at least some of the period that the shared evidence record applies to, then the evidence record is not shared.

Evidence broker adheres to evidence maintenance patterns

An evidence maintenance pattern enforces a set of evidence maintenance restrictions and behavior on evidence sharing that determines how an evidence type is instantiated, corrected, and succeeded. Therefore, the rules that are applied to a shared evidence record's type through an evidence pattern must be maintained when a target case accepts and activates shared evidence:

- If a shared evidence record's type can have only a single instance of the evidence, another instance of the same evidence type is not activated.

- If a shared evidence record's type can have only a single instance of the evidence during a particular period, another instance of the same evidence type is not activated unless it is for a different period.

For example, consider that an evidence broker sharing configuration exists to share the foster care and foster care payment evidence types between income support integrated cases that are trusted sources. The foster care evidence type has been assigned an evidence pattern of single timeline, and the foster care payment evidence type has been assigned an evidence pattern of multiple with succession. A person has an existing integrated case A with a foster care evidence record, and two foster care payment evidence records for different payment types. The same person has a second integrated case B that contains the same foster care and foster care payment evidence records. When a caseworker adds a new foster care payment for a different payment type to integrated case A, the evidence broker shares the new foster care payment to integrated case B. The evidence broker has adhered to the evidence pattern for foster care payments, that allows multiple instances of foster care payments on a case.

Removal of in-edit evidence records

The evidence broker shares the removal of evidence records, as well as the insertion and modification of evidence records. If a record that matches a shared removed evidence record is found on the target case, the matched record is removed from the target case. Any in-edit records that are associated with the removed record on the target case are also removed.

Differences in sharing configuration require manual intervention

An administrator can configure particular evidence types to be shared seamlessly between cases without manual intervention by a caseworker. However, to avoid discrepancies, the evidence broker places some evidence records that are normally processed seamlessly into a caseworker's incoming list for manual review and processing. For more information, see the *Evidence records and data matching* topic.

Related tasks

Creating sharing configurations
Use the sharing configuration wizard to configure the sharing of evidence from a source case type to a target case type. You can specify the types of identical evidence to be shared. You can also specify the sharing of logically equivalent evidence, by mapping evidence types on the source case to logically equivalent evidence types on the target case.

Configuring evidence patterns
An evidence maintenance pattern is a set of rules and characteristics that you can apply to an evidence type. You can designate how to instantiate, correct, and succeed that evidence type. You can apply one evidence maintenance pattern to each evidence type.

Identical and logically equivalent evidence

IBM Cúram Social Program Management allows caseworkers to capture and share information about a client. The system design of IBM Cúram Social Program Management means that information is stored as evidence. Evidence types contain a specific type of information that is collected from the client. If the information is stored in exactly the same format then that information is shared using an identical flow. If the information is represented in a different format between a source and target, then you must use a logically equivalent evidence flow.

In a logically equivalent evidence sharing configuration, an administrator can map the evidence attributes to be shared between cases through an XML rules file. The XML rules file also specifies other conditions that define how logically equivalent evidence is shared. Therefore, the broker can share matching information between evidence on source and target cases, and also recognize the variation in the structure of information between evidence on different cases.

For example, for a caseworker, the social security number evidence type and the identifications evidence type are logically equivalent because they both share a social security number attribute. However, the identifications evidence type contains extra attributes that are not included in the social security number evidence type. An administrator can create an XML rules file that maps the social security number attribute on the social security number evidence type and the identifications evidence type. Then, the

administrator can upload the XML rules file to a sharing configuration that shares social security number evidence to identifications evidence.

Customization of single type evidence sharing

When an administrator creates an identical evidence sharing configuration, the evidence on both the source case and the target case must be represented by the same evidence type. Therefore, when the evidence broker shares evidence through an identical evidence sharing configuration, the broker compares and maps all attributes in the evidence type.

However, if you want to share only a subset of the attributes in an evidence type, an administrator must create a logically equivalent evidence sharing configuration where an associated XML rules file maps the shared evidence attributes. In the logically equivalent evidence sharing configuration, an administrator can specify the source evidence and the target evidence to be the same evidence type.

Defining logically equivalent evidence
The topics describe how you can analyze logically equivalent evidence and structure the flow of evidence if appropriate.

When you complete the analysis of data and evidence flow, you can use the XML rules file to implement the evidence sharing requirement. See the related links.

Related tasks
Creating sharing configurations
Use the sharing configuration wizard to configure the sharing of evidence from a source case type to a target case type. You can specify the types of identical evidence to be shared. You can also specify the sharing of logically equivalent evidence, by mapping evidence types on the source case to logically equivalent evidence types on the target case.

Configuring logically equivalent evidence
To share data where the representation of the data's structure and format differs between source and target case types, you must configure a logically equivalent evidence sharing configuration. Map the evidence attributes to be shared between two case types through an XML rules file that also specifies other sharing actions. The XML rules file must adhere to an XML rules schema that is included in the evidence broker installation.

Related reference
XML sharing rules schema
The XML sharing rules schema provides the elements and attributes that you can use to define an XML sharing rules file for mapping logically equivalent evidence types.

Sharing rules XML samples
The sharing rules XML samples provide guidelines on how to use the sharing rules XML schema to map logically equivalent evidence types.

Evidence analysis
If you consider that data is logically equivalent, then you need to conduct an analysis of the data. The analysis includes looking at the underlying data structure and an initial reassessment of how the structures might potentially map to each other.

Data analysis

As a starting point, understand the relationships between the evidence types in the underlying structure. The mapping might be a single evidence type on the source to a single evidence type on the target but it might be to one or more evidence types on the target. For example, Pregnancy is logically equivalent data but it is a single evidence type in Insurance Affordability, but represented as Pregnancy and Unborn Child data structures in Income Support.

Verify all possible values that are available for each attribute to finalize whether each attribute mapping is correct for the cases and evidence types in question.

You also need to understand the code table values and the full significance of each value to finalize whether each code table mapping is correct for the cases and evidence types in question. For example, "Prizes and Awards" is a code table value in Insurance Affordability, and it might be considered similar to 'Bonus'. However, it is not certain logical equivalence exists so the XML samples do not include a code table mapping for this type. For more information about the XML samples, see the related link.

Ultimately, you must determine whether logically equivalent evidence exists and then map the appropriate values. For example, if you map Income to Paid Employment - Earned Income, income types exist for Paid Employment - Earned Income that do not exist for Income, so no logical equivalence exists for this data.

Once the mapping of data structures is in place then the flow of data throughout the system needs to be analyzed, to evaluate how it might potentially be shared throughout the system from each starting point and therefore what you would want the system to do in each sharing flow.

For example, even though SSN Details and Identifications are considered logically equivalent, the analysis of the flow of data established that the starting point of evidence flow for SSN Details is earlier than for Identifications, as a client can indicate that they applied for an SSN before receiving an actual SSN. The Identifications evidence is not affected by the SSN application and consequently the starting point evidence flow for Identifications information is different. The difference introduced conditions around the sharing of this evidence as you want to share from SSN Details to Identifications when an actual SSN value exists. For a sample of SSN Details to Identifications, see the related link.

Attribute analysis

You can decide to use logically equivalent mapping for the source and target evidence if:

- A different set of attributes exist on the source and target, and you need to share one or many of these attributes.
- Individual evidence attributes have a different name but represent the same data.
- You need to map a subset of attributes rather than all attributes on an evidence type.
- No equivalent code table and values exist on the target case, but you require some or all of the code table values from the source evidence type on the target.

If you select individual attributes on the evidence types to map as logically equivalent, then you define a link between two types of evidence that gives them an identical status for system processing.

For system processing purposes, you use the XML rules file to define and map the attributes of an evidence type and establish their logical equivalence.

Evidence attribute mapping

See the `EvidenceMapping` and `Mapping` XML elements to complete the mapping of attributes for evidence types in the XML rules file. See also the `sourceCodeTable` and `targetCodeTable` attributes of the `Mapping` element for code table value mapping.

Default IBM Cúram Social Program Management installation and samples

A default installation provides samples for the Insurance Affordability and Income Support case scenarios. The samples illustrate some implementations of logically equivalent evidence using the XML schema for evidence sharing. The samples reference the caseworker scenarios that they maintain and how the caseworkers might expect to work with logically equivalent sharing.

The XML samples are available on DeveloperWorks in a starter pack. See also the related link for XML samples.

Related reference
Sharing rules XML samples

The sharing rules XML samples provide guidelines on how to use the sharing rules XML schema to map logically equivalent evidence types.

XML sharing rules schema
The XML sharing rules schema provides the elements and attributes that you can use to define an XML sharing rules file for mapping logically equivalent evidence types.

Supported actions and data structures
You can apply several instructions or actions to evidence types to complete the flow of evidence across IBM Cúram Social Program Management source and target cases for logically equivalent evidence. You might also want to consider the data structures for evidence types on source and target cases.

Supported actions

By applying some of the available actions in a logically equivalent sharing configuration, the evidence flow finalizes the sharing of data between the source and target cases with additional activity. During evidence sharing, some of the following evidence processing events can take place. Review the evidence types and actions in conjunction to see how these events can affect the flow of evidence sharing.

Display data for review and confirmation
    As data is shared, it might be necessary to display some evidence for further review by a caseworker. The review can apply to both changed data and shared data but also to evidence that is not changed to ensure that consistent data is maintained between a source and target. A change might occur in the integrity of the overall data if other changes are in progress on the case and it is no longer safe to broker evidence. See the disability evidence type.

Create additional evidence
    The logically equivalent evidence actions add new parameters after the attribute mapping takes place. You might use this action to create child evidences for parent-child evidence types. See the pregnancy evidence type.

End dating succession
    When a new evidence record is created, a succession style is used to create the new record. End dating if applied allows a new record to be created with a new effective or start date. You might need to apply the succession style if no succession style is in place on the target evidence. See also evidence maintenance patterns.

Filter evidence subtypes
    If additional categories of evidence exist for an evidence type, then you can select one category of evidence from the evidence type. As a result, you are able to handle evidence types when evidence is stored in a hierarchical structure that uses subcategories. See the identifications evidence type.

If you decide the evidence flow requires some specific actions, you can set them through an XML rules file.

Supported data structures

Data mapping in logically equivalent evidence currently supports various different data structures between source and target. However, a restriction applies to logically equivalent evidence mapping and sharing configurations. To enable the evidence broker to track a shared instance of logically equivalent evidence, the output from an instance of shared logically equivalent evidence must be a single evidence record. Therefore, individual shared evidence resolution actions are available for each evidence record, which are to either insert, update, or remove the evidence at the target case.

The following mappings are supported:

Single evidence type to single evidence type
    The mapping requires a sharing configuration to be set up by an administrator with a single sharing XML file that contains the attribute and code table mappings between the evidence types. Refer to the many examples in the sample XML files, benefit to benefit, disability to disability, or SSN details to identifications evidence.

Single evidence type to many evidence types

Given the restriction, the logically equivalent mappings must be between two specific evidence types, but the target evidence type can result in the creation of child records if required. Refer to the mapping of pregnancy to pregnancy and unborn children in the sample XML files for examples.

Another example of sharing from a single evidence type to many evidence types is when you share the income evidence type in Insurance Affordability cases to paid employment and earned income evidence in Income Support cases. Again, given the restriction to share and track a single evidence type, the mapping is achieved by individual logically equivalent sharing configurations, each with its own sharing XML file. The broker handles the recreation of the relationship after the evidence is mapped and shared.

Many evidence types to single evidence type

The restriction applies as this mapping provides a single output evidence record for tracking. The input of many evidence types is achieved by specifying multiple `EvidenceMapping` elements in the XML schema. Refer to the sample XML files, paid employment and earned income evidence in Income Support cases sharing to income evidence in Insurance Affordability cases.

Evidence flow instructions

See the `Action`, `Set`, `Display`, and `Create` XML elements and child elements in the XML rules file to add, review, or amend evidence to complete the appropriate sharing of evidence for the logically equivalent configurations.

See the `ShareWhen` and `Filter` XML elements to refine how the data is shared by adding restrictions to the flow of evidence.

Related reference

Sharing rules XML samples
The sharing rules XML samples provide guidelines on how to use the sharing rules XML schema to map logically equivalent evidence types.

XML sharing rules schema
The XML sharing rules schema provides the elements and attributes that you can use to define an XML sharing rules file for mapping logically equivalent evidence types.

Identifications and SSN details evidence types
The sharing rules XML file for mapping identifications and SSN details evidence is provided in the Insurance Affordability solution for sharing SSN details evidence from an Insurance Affordability case to person level identifications evidence. For example, an administrator can configure the broker to share social security number evidence from an Insurance Affordability case to identifications evidence for a person. Likewise, an administrator can configure the broker to share identifications evidence from a person's evidence to an Insurance Affordability case.

The following table shows how, in a sharing configuration, an administrator can map a subset of attributes between the identifications evidence and the SSN details evidence:

Table 1: Mapping of identifications evidence to SSN details evidence	
Identifications evidence	**SSN details evidence**
`participant`	`participant`
`alternateID`	`alternateID`
`altIDType`	`altIDType`
`fromDate`	`fromDate`
`toDate`	`toDate`

The SSN details evidence also contains the attributes `ssnStatus`, `noSSNReasonCode`, `noSSNReason`, and `OtherDetails`. However, they are not mapped in the sharing configuration because a potential

mapping does not exist for the attributes. The identifications evidence also contains a `preferredInd` attribute, but it is not mapped in the sharing configuration.

The data type of the mapped attribute `altIDType` is code table. The `altIDType` attribute on both the identifications evidence and the SSN details evidence references the same `ConcernRoleAlternateID` code table. Therefore, in the sharing rules XML file, an administrator can map the code table value CA1 that relates to the social security number evidence for both the identifications evidence and the SSN details evidence, as shown in the XML samples.

Table 2: Mapping the altIDType attribute between identifications evidence and SSN details evidence through the `ConcernRoleAlternateID` code table	
Identifications evidence code table value	**SSN details evidence code table value**
`CA1 Social Security Number`	`CA1 Social Security Number`

With the previous configuration, when a caseworker enters a value for social security number on either identifications evidence or on SSN details evidence, it is shared as identical when the broker shares evidence between the two evidence types.

Filtering an evidence subcategory

Identifications evidence can keep a range of identifications, so use an evidence subtype to ensure you map the correct identification. In this scenario, the identifications subtype is the social security number.

See the `Filter` XML element in the sample sharing rules XML schema for information about identification evidence subcategories that you can use for the identifications evidence type.

System processing for logically equivalent evidence sharing
Evidence sharing in a logically equivalent evidence sharing configuration follows the same general rules for evidence sharing as evidence sharing in an identical evidence sharing configuration.

Therefore, the evidence broker shares logically equivalent evidence between cases when all the following conditions are met:

- An administrator has configured sharing between a source case and a target case.
- The broker identifies shared source evidence as being logically equivalent to evidence on the target case, as defined by the mapped evidence attributes and other conditions in the XML rules file.
- The evidence has been triggered for sharing; for example, a caseworker modifies any attribute on the evidence that has been mapped as logically equivalent. However, the broker shares only mapped attributes. If only an unmapped attribute on the evidence is modified, the broker shares the evidence to the target case as unchanged.

When the broker shares a logically equivalent evidence record from a source case, if an evidence record of the same type does not exist on the target case, the system creates an evidence record on the target case. The type of the evidence record that is created on the target case matches the target evidence type that is defined in the sharing configuration's XML rules file. The system then populates the new evidence record with the information that is available on the source evidence record. Details within the XML rules file can specify any specific steps that need to be taken when the evidence record is created.

A different evidence pattern can be assigned to a source evidence record compared to the evidence pattern that is assigned to the logically equivalent target evidence record. The system must adhere to the rules of the evidence pattern that are assigned to the evidence record on the target case.

Share new evidence to mapped logically equivalent evidence example

For example, an administrator has set up a logically equivalent sharing configuration to share social security number details evidence from Insurance Affordability integrated cases to identifications evidence on person evidence. The social security number details evidence is configured as a trusted source on the target case.

A caseworker has added Mary Smith as a case member on an Insurance Affordability integrated case. The identifications evidence that exists on Mary's person evidence does not include the social security

number evidence subtype. The caseworker adds social security number evidence to Mary's Insurance Affordability integrated case, and populates the social security number.

The evidence broker shares the social security number evidence from the Insurance Affordability integrated case to Mary's person evidence. On Mary's person evidence, the broker creates and activates the shared evidence as identifications evidence, and populates all the mapped evidence fields from the shared social security number evidence.

Logically equivalent evidence sharing rules

The broker also adheres to the following rules when it shares logically equivalent evidence:

Reviewing extra unmapped evidence attributes on target case evidence

An administrator might map some, but not all, attributes on an evidence type as logically equivalent. To prevent unmapped attributes on target case evidence from being either incorrectly overwritten, or retained incorrectly without manual intervention, an administrator can configure a mapped dependency attribute that indicates a business dependency between the mapped and unmapped attributes. If the attribute value changes, a caseworker must review the unmapped attribute values on the target case to evaluate whether they are still either correct or relevant based on a change in the values of the mapped attributes:

- When the dependency attribute changes and additional information is included on the target evidence record, the source evidence record is placed on the caseworker's incoming list.
- When the dependency attribute changes and no additional information is included on the target record, the source evidence record is accepted and activated automatically based on the sharing configuration.
- When the dependency attribute does not change, the source evidence is automatically accepted and activated based on the sharing configuration.

Similarly, an additional participant on a shared source evidence record can change and cause additional information in unmapped attributes to be available on the target evidence record that are not available on the source evidence record. For example, on a student evidence record, the school participant can change. In such a scenario, a caseworker must review the additional information on the target evidence record in the incoming list and ensure that it is still relevant to the additional participant on the target case. However, if no additional information is populated in unmapped attributes on the target evidence, the evidence is automatically accepted and activated where possible.

Target evidence contains extra, unmapped information example

An administrator has set up a logically equivalent sharing configuration to share disability evidence from Insurance Affordability integrated cases to disability evidence on income support integrated cases. The disability evidence is configured as a trusted source on the target case.

A caseworker adds the client John Smith as a case member of an Insurance Affordability integrated case and also as a case member of an income support integrated case:

- Disability evidence records exist on both the Insurance Affordability integrated case, and also on the income support integrated case, where the disability type is set to brain injury.
- The same information is present on the fields that are mapped between the two evidence records.
- Additional information that indicates a brain injury category is present in the unmapped fields on the target disability evidence record that is on the income support integrated case.

The caseworker then changes the disability type in the disability evidence record on the Insurance Affordability integrated case from brain injury to physically disabled/incapacitated. The broker shares the modified disability evidence record from the Insurance Affordability integrated case to the disability evidence record on the income support integrated case. The additional brain injury category information that is present in the unmapped fields on the target disability evidence record is no longer relevant. Therefore, the broker adds the shared disability evidence record to the caseworker's incoming evidence list for manual review and processing.

Evidence end-dating on the target case

Some evidence types do not support the modification of evidence records, known as succession. Instead, to accommodate a change in evidence, the previous evidence record must be end-dated and a new evidence record created in its place. Therefore, a scenario can occur where the broker shares a logically equivalent evidence record from an evidence type that supports succession, to an evidence type that does not support succession. In such a scenario, the sharing configuration can determine that the system should end-date the target evidence record, and insert the information from the source evidence record into a new evidence record on the target case. The system maintains the correct dates on any evidence records that are either end-dated or created as a result of sharing logically equivalent evidence. The end-date on an existing target evidence record is specified according to the following criteria:

- If the shared evidence record has only a start date, the start date is specified as the end-date on the existing target evidence record.
- If the shared evidence record has both a start date and an effective date, the effective date is specified as the end-date on the existing target evidence record.

End-dating evidence on a target case example

For example, an administrator has set up a logically equivalent sharing configuration to share identifications evidence from person evidence to SSN details evidence on Insurance Affordability integrated cases. The identifications evidence is configured as a trusted source on the target case. If identifications evidence is shared to the Insurance Affordability case, the XML rules file specifies that if SSN details evidence exists on the target case, it should be end-dated. The system should then create an SSN details evidence record on the target case and populate it with the information from the shared identifications evidence.

A caseworker has added John Smith as a case member on an Insurance Affordability integrated case. The Insurance Affordability case contains SSN details evidence in which the value of SSN `status` has been set to `Applied for SSN`.

The caseworker enters John's social security number into the identifications evidence on his person evidence. The broker shares the identifications evidence to John's Insurance Affordability case. The system end dates the SSN details evidence on the Insurance Affordability case, and sets the end date to the effective date from the shared identifications evidence. The system then creates an SSN details evidence record that includes the information from the shared identifications evidence, and sets the start date of the new record to the effective date of the shared identifications record. The system activates all the changes.

Verification items

By default, the broker does not share verification items that are associated with an evidence record to a target case. However, an administrator can configure the evidence broker to share verification items that are associated with either identical or logically equivalent evidence, as well as the evidence that is being shared to the target case.

When a client first provides evidence for a case, a caseworker can request a verification record that confirms the validity of the evidence. The caseworker then enters the evidence and the verification onto the case. An administrator can configure conditional verification rules that determine whether a verification applies to an evidence record based on a set of conditions. For more information about conditional verification rules, see the related link.

If the broker shares verification items between a source case and a target case, the verification documentation that was provided for the evidence at source is copied and applied to the evidence on the target case. When the shared evidence record is either inserted or modified on the target case, the verification engine re-runs on the copied verification documentation on the target case. Because the verification requirements are not necessarily the same on the source case and the target case, the verification engine assesses whether the evidence requires reverification on the target case. However, if the verification requirements are the same between the source case and the target case, it is not necessary for the caseworker to reverify evidence that is already verified for the client.

For each source to target case evidence sharing configuration, an administrator can configure the broker to share verification items under the following circumstances:

Always
> The broker always shares associated verification items, even if they are not used or required by the target case.

If applicable
> The broker shares associated verification items to the target case only if they are used or required by the target case, as defined in any conditional verification rules configurations.

Adding shared verification items to a case

When the broker shares evidence to a target case, different verification requirements on the source case and the target case can prevent the evidence from being shared seamlessly and the evidence remains in a not verified status. The broker adds the evidence to the caseworker's incoming list and sends a notification that the evidence requires further verification.

Related concepts

Implementing Custom Conditional Verification Rules
Evidence validations and verifications
When the broker shares evidence to a target case, the system triggers validation and verification checks on the individual evidence types. The checks ensure that evidence that the broker adds to the target case maintains the data integrity that is required for the case.

Evidence sharing triggers

If a sharing configuration exists between a source case and a target case, certain caseworker actions trigger the evidence broker to share evidence records between the cases.

The following caseworker actions trigger the evidence broker to share evidence, where a relevant sharing configuration exists between the source and target case types. The broker shares the most recent active version of evidence in accordance with sharing configurations, evidence sharing rules, and evidence maintenance rules. When the broker shares evidence to a target case, the system either resolves the evidence automatically onto the target case, or adds the evidence to the caseworker's incoming evidence list for manual review and processing.

Adding a case member

> If a caseworker adds a person as a case member to a case, the evidence broker shares the person's evidence and the evidence from any other cases that the person is included on, to the case.

Activating evidence

> If a caseworker activates the addition, modification, or removal of evidence onto a case, the evidence broker shares the updated evidence to the relevant target cases.

Authorizing an application

> If a caseworker authorizes an application, the evidence broker shares the evidence from the associated application case to the relevant target cases.

Reviewing evidence on a case's incoming list

The evidence broker places some evidence records into a caseworker's incoming evidence list for manual review and processing. Above both the incoming and existing evidence list, a timeline of information is displayed where you can click a date to view the evidence for that point in time.

Before you begin
Log on to the IBM Cúram Social Program Management application as a caseworker, and display the target case that has incoming evidence.

About this task

The broker places an incoming evidence record into the caseworker's incoming evidence list on the target case for manual review and processing in the following circumstances:

- The evidence type of the evidence record that is being shared is not specified as a trusted source in the sharing configuration.
- The parent and child evidence types have a conflicting sharing configuration.
- The broker cannot identify an exact match between the incoming evidence record and the existing evidence record on the target case.

Before the broker can display evidence in the target case's incoming evidence list, the broker must first create a related case participant role on the case if the role does not exist. The broker creates case participant roles only for evidence that has been shared to the target case in accordance with the defined sharing configuration and rules. If a caseworker rejects incoming evidence on a target case, the caseworker might need to review and remove some related participant roles on the target case.

For example, if a sharing configuration has been defined to share student evidence from Insurance Affordability integrated cases to Income Support integrated cases. A caseworker adds and activates new student evidence onto John Smith's Insurance Affordability case, where the student evidence includes school details. As defined by the sharing configuration, the broker shares the student evidence to John Smith's Income Support case and displays the evidence in the case's incoming list. The broker adds the school to the Income Support case as a case participant. If a caseworker rejects the incoming student evidence from the Income Support case, the school remains on the case as a case participant. A caseworker must remove the case participant.

A timeline of information is displayed above both the incoming evidence list and the existing evidence list. For the currently expanded evidence type, color-coded dots on the timeline represent evidence records:

- A blue dot indicates the currently selected evidence record. The latest evidence record on the timeline is selected by default.
- A red dot indicates an evidence record that needs to be resolved.
- A larger red dot indicates an evidence record that is currently selected and needs to be resolved.
- A gray dot indicates the evidence records for all other dates on the timeline that are not selected and that do not need to be resolved.

Procedure

1. On the target case, click **Evidence** > **Incoming Evidence**.
   A table displays a list of incoming evidence types that require manual review and processing.
2. Expand an evidence type to select it.
   For the evidence type that you select, a comparison view displays a list of evidence records that are incoming to the case next to a list of evidence records that exist on the case.
3. On either the incoming or existing evidence timeline, click a date to view the evidence for that point in time.
   The latest date is selected by default.
4. Review the incoming evidence records and, if appropriate, compare them to the existing records on the case.
   For shared inserted evidence records, if evidence of the selected type does not yet exist on the target case for the client, then the existing evidence records list might not contain any records to compare with the incoming records. For shared modified records, attribute values that differ between incoming and existing records are highlighted.
5. Select an action on either the incoming evidence, or on the existing evidence.
   The actions that you can choose depend on whether the shared evidence record is either an insertion, a modification, or a removal.

   Actions that you can choose on the incoming evidence include the following options:

Option	
Add to case	If the incoming evidence does not exist on the target case, you can use the **Add to Case** option to insert it onto the case. You can review and, if necessary, edit the values before you add the evidence to the case. Also, if the evidence includes a timeline of historical information, it is automatically added to the case as part of the same action. However, if any mandatory values are missing from the historic information, the evidence cannot be added to the case.
Reject as not relevant	A window opens where the broker requests confirmation that you want to remove the incoming evidence record from the incoming evidence list because it is not required on the target case. If you reject the incoming record, the evidence record will not be resolved and might be redisplayed in the incoming evidence list in the future. Also, because the evidence record has not been linked to an evidence record on the target case, the system will not be able to automatically process future shared updates to the evidence record.

On the existing evidence, you can choose the following option:

Option	
Update with incoming	A wizard is displayed where you can select a specific record to use to update the existing evidence record on the case. You must also specify whether the update is to create a new version of the target evidence record because of a change in circumstance, or to correct the target evidence record.
Set as latest of incoming	Select this option if you want to merge the incoming historical evidence onto the target case but also retain the existing evidence on the target case as the latest version of the evidence. A wizard displays a list of incoming historical records based on the date that you select on the timeline. You must select a specific incoming record to associate with the existing evidence record on the case. You must also specify whether the update is to create a new version of the timeline on the target case, or to correct the evidence on the source case based on the existing evidence on the target case. To create a new version, you must select the latest evidence record on the incoming evidence timeline, and the earliest evidence record on the existing evidence timeline. A window is displayed where you can review and, if required, modify the existing evidence.
Remove an existing record	This action is displayed if the incoming evidence record was removed from the source case. A

Option

window opens where the broker requests confirmation that you want to remove the existing record from the target case.

Adding incoming evidence to a case

In the incoming evidence section, if you select the action to add incoming evidence to a case, a timeline of historical evidence records is also added to the case automatically. Therefore, a full set of evidence is available on the case without the need to add each history evidence record individually

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A window is displayed where you can review and confirm the addition of the incoming evidence to the case. However, if a succession of evidence records is to be added to the case, only the latest record in the succession is populated into the window. All the other historical records are automatically added to the timeline of information on the target case. After the records are added, all the succession records that were added to the case are displayed in the existing evidence section.

All the evidence records in a succession are added to the case unless mandatory information is missing from any succession record that prevents its addition to the case.

If a set of shared data contains a hierarchy of evidence records, you must add each set of records from the hierarchy to the case individually. For example, if an Income Support client is receiving two separate payments from a particular employment, the following evidence records are created:

• One paid employment parent evidence record

• Two income child evidence records, one record for each of the two payments.

You must add the parent evidence record to the case, which results in the addition of the full timeline to the case for the paid employment record. You must then separately add each of the child income records to the case, which results in the addition of a full timeline to the case for each of the income records.

Updating a case with incoming evidence

If an evidence record exists on a target case that is similar to incoming evidence, you can select an action to update the existing evidence record with the incoming evidence. Therefore, it is unnecessary to manually enter the same evidence twice. You can correct an existing record based on the incoming evidence. Alternatively, if appropriate and the evidence type supports successions, you can create a new version of the evidence record on the target case.

Select incoming evidence record

When you select the action to update with incoming evidence, the first page of a wizard is displayed where you must select a specific incoming evidence record to use for updating the existing record. You must select from a list of records that correspond to the date that you selected on the timeline, for evidence of the same type as the existing evidence record from which you selected the action.

Specify new version or correction

In the second page of the wizard, you must specify whether the incoming evidence record is a new version of the existing evidence on the target case, or a correction to the existing record on the target case. The new version option is only available if the incoming evidence's type supports successions.

New version

You must enter an effective date in the **Effective Date** field. The system validates that the effective date does not already exist on the case, because if it does exist then a correction action might be required instead.

The system will create a new succession record on the existing case by using the incoming evidence, the effective date, and any modifications that you enter in the final page of the wizard. The system will link the new succession record on the existing case to the source record. The system will also check for a timeline of historical information that is associated with the incoming evidence that needs to be taken onto the case.

Correction

The **Effective Date** field is prepopulated, and you can update the prepopulated value if required. The system will correct the existing evidence record on the target case by using the incoming evidence, and any modifications that you enter in the final page of the wizard. The system will link the corrected record on the existing case to the source record. When the corrected record is activated, the broker will share it back to the source case or cases so that any modifications that you enter in the final page of the wizard are synchronized.

Review and modify incoming evidence

The incoming evidence is populated into the third page of the wizard where you can review and modify the incoming evidence, if required. When you save the updated evidence, the system performs some validation checks.

For any of the incoming or existing evidence records that have previously been linked, the system validates that the records will not be linked to a different set of data. For example, a client has two paid employments and receives income from both employments, where both incomes change over time. If succession records are already connected for the first employment, the validation ensures that the latest income change from the first employment is not linked to the succession history for the second employment.

If validation is successful, the system then updates the evidence on the existing case as described previously, depending on whether you selected a new version or a correction.

Setting the existing evidence as the latest

You can select an action to set the existing evidence on a case as the latest version of the incoming evidence, so that the complete timeline of the evidence is available on the target case. You can correct the incoming evidence's source record based on the existing evidence. Alternatively, if appropriate and the evidence type supports successions, you can link the latest succession record on the existing case back to the source record.

Select incoming evidence record

When you select the action to set the existing evidence on a case as the latest version of the incoming evidence, the first page of a wizard is displayed where you must select a specific incoming evidence record to associate with the existing record. You must select from a list of records that correspond to the date that you selected on the timeline, for evidence of the same type as the existing evidence record from which you selected the action.

Specify new version or correction

In the second page of the wizard, you must specify whether the existing evidence record is a new version of the incoming evidence record, or a correction to the incoming evidence. The new version option is only available if the incoming evidence's type supports successions.

New version

You must enter a date in the **Effective Date** field that specifies the date that the existing evidence is effective from. The system does not enter the business start date that is specified on the timeline of the existing evidence as a default value.

The system will validate that you selected the latest evidence record on the incoming evidence timeline, and that you selected the earliest evidence record on the existing evidence timeline. The evidence from the two timelines cannot overlap. If the validation is successful, the system will then establish the correct historical timeline of information for the evidence based on the incoming timeline plus the existing evidence on the target case.

Correction

If the incoming evidence timeline and the existing evidence timeline overlap by just one evidence record, you can apply a correction to correct the overlapping record on the source case with the values from the overlapping existing record on the target case. The **Effective Date** field is prepopulated, and you can update the prepopulated value if required. The system will link the existing evidence record with the source evidence, which will result in correction of the evidence

at source by using the existing evidence record. The system will also establish whether a new historical timeline of information is required on the existing case based on the incoming timeline plus the existing evidence.

Review and modify incoming evidence

The existing evidence is populated into the third page of the wizard where you can review and modify the existing evidence, if required. When you save the existing evidence, the system performs some validation checks.

For any of the incoming or existing evidence records that have previously been linked, the system validates that the records will not be linked to a different set of data. For example, a client has two paid employments and receives income from both employments, where both incomes change over time. If succession records are already connected for the first employment, the validation ensures that the latest income change from the first employment is not linked to the succession history for the second employment.

If validation is successful, the system then updates the evidence on the existing case as described previously, depending on whether you selected a new version or a correction.

Planning evidence sharing configurations

When you plan what evidence to share between different case types in your organization, review the guidelines in this topic. Consider whether the same evidence type is used on more than one case type. If an evidence type is used in more than one place, consider whether changes to the data should be communicated to other cases. Also, consider whether a target case type should be configured to automatically accept any changes, or should caseworker be forced to decide whether to accept incoming shared evidence.

Note: For system processing to work correctly, it is essential that person and prospect person evidence that is configured outside of the person tab is configured to share any changes back to the person tab.

For example, an organization might have a child welfare case that maintains identification evidence for a person, and an income assistance case that also maintains identification evidence for the same person. If sharing is not configured between the two case types, it is important to share evidence back to the individual's person tab, because it ensures that all the person and prospect person evidence can be viewed centrally.

Recommended sharing configurations for organizations that are using Universal Access

The following sections outline recommended sharing configurations for organizations that are using Universal Access:

Sharing from a source person to a target application case
An existing registered person applies for a program online. The caseworker who is managing the application case might want to know what information exists for the person and have the opportunity to update the information that is received on the application case for the person.

Sharing from a source application case to a target person or prospect person
When the application is complete, programs are authorized. New information might have been received about the person on the application that should be shared to the person's record.

Sharing from a source application case to a target ongoing integrated case or product delivery case
When an application case is authorized, you can configure the evidence broker to share the evidence from the application case. However, it should not be necessary for a caseworker to review and apply changes to evidence again on the integrated case. Therefore, the trusted source setting in the sharing configuration should enable the shared evidence to be automatically accepted onto the target case.

Sharing from a source ongoing case to a target application case
A person has an existing ongoing case and makes a new application for benefits. The intake worker who is managing the application is interested in receiving the existing information on the system for the person because it might impact the person's new application.

Sharing from a source ongoing case to a target person or prospect person
It is important that the person record contains all the person evidence changes, and that it is up to date. Therefore, sharing should be enabled from an ongoing case, to ensure that any updates to evidence are shared to the person record where system processing relies on the data.

Sharing from a source person to a target ongoing case
Any evidence that is captured about a person should be shared to an ongoing case to ensure that the information that might affect eligibility and entitlement is up to date. Therefore, the caseworker who owns the ongoing case is provided with information about a case member that was updated elsewhere. The trusted source setting in the sharing configuration can be configured to force caseworkers to review the evidence, and to then decide whether to accept or reject the evidence for the target case.

End-to-end evidence scenarios

The scenarios in this section describe the full end-to-end flow of evidence through the system from application to ongoing case.

Citizen applies for benefits
A citizen, Mary, applies for a benefit online. Mary has never received benefits in the past and she is not recorded on the system. The scenario outlines the steps for applying for a benefit, and shows how the evidence broker shares Mary's data between cases.

1. Mary completes an online application for benefits and enters the following information:

   - Name
   - Date of birth
   - Gender
   - Phone number
   - Email address
   - Address
   - Income
   - Expenses
   - Employment

2. Mary submits the application to the agency where the search and match process determines that Mary is not registered on the system.

3. Mary is automatically registered as a person. The registration process captures the mandatory registration information, which is Mary's name, date of birth, and gender. The system creates the following person evidence records: name, birth and death, and gender.

4. An application case is created automatically when the application is submitted. All the evidence that is captured is mapped to the new application case and is automatically activated.

5. Later that day, Mary arrives for an interview with Paul, the intake worker, and realizes that the date of birth that she supplied on her application was typed incorrectly. Paul selects the birth and death evidence on the application case, edits the date of birth to the correct date, and saves the details.

6. Paul reviews the rest of the application case evidence. Because everything is complete and in order, Paul authorizes the program that Mary applied for in the application. The application authorization triggers the evidence broker to share the application evidence based on sharing configurations. The broker shares only the evidence that is required for the ongoing cases, for the programs that are being authorized.

7. When the application is authorized, an integrated case is created automatically for Mary, and a product delivery case is also automatically created for the program for which Mary has been approved. The evidence broker processing is triggered by the authorization of the application case. The brokering configuration determines what evidence needs to be shared and where it needs to be shared. In this case, the configuration is such that the sharing must occur between the integrated case and Mary's person record. All evidence types that are captured for Mary will be shared to the

integrated case. However, only the following evidence types are configured for sharing to Mary's person record, because the details are more generic and typically apply to any case that Mary is a member of. The additional evidence types such as income, expenses, and employment might be appropriate only for certain types of cases.

- Name
- Birth and death
- Gender
- Phone number
- Email address
- Address

8. The evidence broker shares the following evidence from the application case to the integrated case:

- Name
- Birth and death
- Gender
- Phone number
- Email address
- Address
- Income
- Expenses
- Employment

9. The evidence broker then shares the following evidence from the application case to Mary's person record:

- Name
- Birth and Death
- Gender
- Phone Number
- Email Address
- Address

10. All the evidence that is shared from the application case to the integrated case is configured to be trusted, in which case it is automatically activated when the broker adds it to the integrated case.

11. The evidence that is brokered to Mary's person record is automatically managed as follows:

- The broker adds the phone number, email address, and address evidence to Mary's person tab.
- Because name, gender, and birth and death evidence exist on Mary's person tab, the system processes the evidence as shown in the following steps:
  - For each evidence record, the system performs a check to determine whether the incoming evidence matches with any evidence that is already held.
  - Because the gender and name evidence that is already held on Mary's person record contains the same data as the incoming records, the system treats the evidence as identical and does not update the existing records.
  - The birth and death information record that is shared from the application case does not match the birth and death record that is on Mary's person record. The caseworker corrected Mary's person record on the application case when Mary came in for her application interview. To determine whether the existing record should be updated, the system compares the date that both evidence records were received. In this case, as the application case update to the birth and death evidence is more recent, the system updates the birth and death evidence record on Mary's person record. Any user who views the evidence record can see the update history.

Registered person applies for benefits

John applies for a benefit online. John has received benefits in the past and is recorded on the system. The scenario outlines the steps when a registered person applies for a benefit, and shows how the evidence broker shares John's data between cases.

1. John completes an online application for benefits and enters the following information: name, date of birth, gender, phone number, email address, address, income, expenses, and employment.

2. John submits the application to the agency, where the search and match process determines that he is already registered on the system. John is matched to a registered person on the system through name, date of birth, and gender records.

3. An application case for the benefit is then created for John. All of the information that John supplied in his online application is added to the application case as evidence. An application case is created automatically when the application is submitted. All the evidence that is captured on John's application is mapped to the new application case, as configured by using the Cúram Data Mapping Engine.

4. The evidence broker then shares John's evidence from the person tab to the application case, where it is displayed as incoming evidence. All the evidence that is on the person tab is the same as the evidence that is on the application case, except for the phone number evidence.

5. Paul, the caseworker, reviews and compares the incoming evidence and the existing evidence in his incoming list for the application case. The broker helps Paul to determine the appropriate action by highlighting the differences between the incoming evidence and the existing evidence. A new mobile phone number has been recorded on the application case. Paul chooses not to take the phone number onto the application case because he knows that the number that he has already on the application case is correct. Therefore, Paul selects **Reject as not relevant** for the incoming phone number.

6. Paul finishes his review of the application case evidence and authorizes the application case. The application authorization triggers the evidence broker to share the application evidence based on its sharing configurations.

7. An integrated case is created automatically for John, and also the system creates a product delivery case for the benefit.

8. The evidence broker shares the evidence from the application case to the integrated case.

9. The evidence broker then shares John's application evidence to the person tab. Because the evidence had already been shared from the person to the application case, the evidence is not shared again. Only the new phone number record is shared to the person tab.

Adding a relationship and related person to an integrated case

Mary is a registered person with an integrated case. Mary contacts the agency to inform them that her son John is back in her care. The scenario outlines the steps when a relationship and a related person are added to an integrated case.

1. Mary contacts the caseworker Paul who manages her ongoing case. She advises Paul that her son John, who previously lived with her estranged husband, has come back into her care.

2. Paul accesses Mary's case evidence and sees that no relationship information is recorded between Mary and any other person. Paul creates a new relationship evidence record that relates Mary to her child, John. Paul searches for John and discovers that he is already registered as a person in the system.

3. Paul decides to apply the new relationship record to Mary's case. A reciprocal relationship between John and Mary does not yet exist on the integrated case because John is not a member of the case. After the evidence is applied, the evidence broker is triggered to share the relationship evidence.

4. The evidence broker shares the new relationship evidence to any related case, person, or prospect person record that is included in a sharing configuration for sharing relationship evidence. Therefore, the new relationship record is shared to Mary's person evidence.

5. When the relationship between Mary and John is received in the person tab, the system first determines if a relationship record already exists. Because a relationship is not yet recorded between Mary and John, the new relationship evidence is recorded.

6. When the relationship is added, the system then creates a reciprocal relationship evidence record for John which is displayed on his person tab.
7. After Paul has applied the relationship evidence on the integrated case, he decides to include John as a case member on Mary's case. He selects to add the child John as a member of Mary's integrated case.
8. When Paul adds John to the integrated case, the evidence broker is triggered to retrieve John's evidence from his person record. The broker shares John's evidence from his person record to the integrated case.
9. The caseworker, Paul, sees several incoming evidence records for John, including his name, birth and death, gender, and relationship to Mary.
10. Paul accepts all of the evidence onto the integrated case, where it can be maintained as part of managing the ongoing integrated case.

Sharing logically equivalent SSN evidence to identifications evidence

The scenario describes the processing of an application for a citizen, Fred, who applies for a benefit online. Fred has never received benefits in the past and he is not recorded in the system. An administrator has created a logically equivalent evidence sharing configuration between the identifications evidence that is configured against the person or prospect person, and SSN details evidence that is configured against an integrated case.

The administrator has uploaded an XML rules file to the logically equivalent evidence sharing configuration that shares social security number evidence to identifications evidence. The following table shows the mapped evidence attributes:

Table 3: Logically equivalent mapping of identifications evidence to SSN details evidence	
Identifications evidence	**SSN details evidence**
participant	participant
alternateID	alternateID
altIDType	altIDType
fromDate	fromDate
toDate	toDate
comments	comments

The following attributes on the SSN details evidence are unmapped:

- ssnStatus
- noSSNReasonCode
- noSSNReasonOtherDetails

The following attribute on the identifications evidence is unmapped:

- preferredInd

With the mapping of the SSN details and identifications evidence attributes in the logically equivalent evidence sharing configuration, the broker can share evidence between the two evidence types as if they are identical evidence.

The following steps illustrate how the logically equivalent evidence sharing configuration applies to Fred's application:

1. Fred completes an online application for benefits and enters the required information along with the following SSN identification details:

Table 4: Fred's SSN identification details	
SSN identification details attribute	**Value**
SSN Identification Reference	123-45-6789
Type	SSN
Comments	A brief note

Fred does not record any details for the attributes SSN status, No SSN reason, or No SSN other details.

2. Fred submits the application to the agency where it is determined, by using the search and match process, that he is not registered on the system.

3. Fred is registered as a person. The registration process inserts Fred's name, date of birth, and gender, which are mandatory registration information. The system creates the person evidence records, including name, birth and death, and gender.

4. An application case for benefits is then created for Fred and all of the evidence that he supplied in his online application form is added to the application case. An application case is created automatically when the application is submitted, and all the evidence that is captured on the application is mapped to the new application case, by using the Cúram Data Mapping Engine.

5. Paul, the intake worker, reviews the application case evidence and authorizes the application case. When the application is authorized, the evidence broker is triggered to share the application evidence based on evidence sharing configurations.

6. After the application is authorized, an integrated case is automatically created for Fred and the program for which Fred has been approved is added to the integrated case.

7. The evidence broker shares the evidence from the application case to the integrated case. The broker shares the SSN details evidence on the application case directly to the SSN details evidence on the integrated case.

8. The evidence broker then shares Fred's application evidence to his person evidence. The broker maps the SSN details evidence to the logically equivalent identifications evidence in Fred's person evidence. The broker adds the SSN details evidence to Fred's person evidence list as identifications evidence. The broker shares the SSN details evidence as if it is identical evidence in accordance with the sharing configuration's XML rules file.

9. Later the same day, Fred provides details of his passport that was required to verify his date of birth on the integrated case. The receptionist Jan also decides to capture this information in Fred's identifications evidence. Therefore, she does a person search and finds Fred's person record. She opens the person record and then proceeds to create new identifications evidence. Jan selects **Passport** for the type and enters PO111111 for the identification reference.

10. Jan saves the identification record. The evidence broker is triggered to share the identifications evidence to the integrated case.

11. Sam, the caseworker for the integrated case, notices that new incoming evidence has been received. He views the incoming evidence and notices that a passport and ID have been captured for Fred. The record is displayed in Sam's incoming evidence list because the passport identification type has not been mapped in a sharing configuration. Sam decides to reject the evidence because he does not require it for the case. However, if Sam had accepted the evidence, a new SSN identification evidence record would be displayed in in-edit status. However, when the evidence is activated, the system might have invoked a validation to say that the type must only be SSN. If no validation is applied to the evidence type, the evidence would have been applied to the case.

Mandatory verifications on an integrated case

Lisa is a registered person who has two integrated cases. Both integrated cases have a mandatory income verification requirement. Case A requires verification through a pay slip, and Case B requires verification

through both an employer letter and a pay slip. The scenario outlines how the verification is applied and shared.

The following steps assume that a sharing configuration exists to share income evidence between the integrated case types, and that the sharing configuration enables the sharing of verifications with income evidence.

1. Lisa has a meeting with Paul and gives him information about new income.
2. Paul adds the income evidence to Case A, and a mandatory outstanding verification is created on Case A that states that verification by pay slip is required. Lisa gives her pay slip to Paul.
3. Paul adds the pay slip verification document to Case A, which satisfies the verification requirement. Paul activates the income evidence.
4. The evidence broker shares the new income evidence and its associated verification document to Case B.
5. Because the source case is not configured as a trusted source, the income evidence is displayed as incoming evidence on Case B. Paul accepts the incoming evidence, which includes the pay slip document. The verification processing has the following result:

   • The pay slip verification item is a requirement to satisfy income evidence on case B. Because the broker has shared the pay slip verification item from Case A and the verification has been accepted on Case B, the income evidence verification requirement on Case B has been satisfied.

   • The employer letter verification item is also a requirement to satisfy income evidence on Case B. Because the employer letter verification item was not required on Case A, it was not captured on Case A. Therefore, Case B has an outstanding verification requirement to satisfy full verification of the income evidence. Before the evidence can be activated, Lisa must provide a letter from her employer.

6. Lisa returns to the agency the next day with a letter from her employer. Paul adds the verification document to the income evidence on Case B. Both verification requirements are now satisfied and the evidence can be activated.

Applying end dating in the creation of evidence records
When caseworkers create evidence records, they can end date previous evidence records of the same type during the creation process, if an administrator has enabled the end dating feature for the evidence type. Caseworkers create an evidence record by recording the evidence in the first page of the evidence wizard. Then, if the end dating feature is enabled, a second page is displayed in the wizard where caseworkers can end date previous evidence records.

About this task

For information about enabling the end dating of previous evidence when creating evidence, see the related link.

For the evidence end dating option to be displayed to caseworkers in the second page of the evidence wizard, certain criteria must be met. For more information, see the related link to the *New Evidence* topic.

When an evidence record uses a **Preferred Indicator** and if the preferred indicator is set, the evidence record becomes the preferred evidence record even when other evidence records of the same type exist on the case. Only one preferred evidence record of the same type is allowed. Therefore, when a new evidence record is created with the preferred indicator set, and a preferred record exists, the following action occurs. The **Preferred Indicator** on the existing preferred evidence record is automatically cleared, whether it is set to `active` or `in-edit`. Then, the auto-unchecking of the preferred indicator on the evidence creates an `in-edit` record of the evidence. The caseworker must then apply the changes.

Use the following procedure to create an evidence record, and to end date previous evidence records.

Procedure

1. Log on to IBM Cúram Social Program Management as a caseworker user.
2. Open a person or an integrated case.

3. Click the **Evidence** tab.
4. To add an evidence record to the case, in the first page of the wizard, enter a new evidence record.
5. If the required value for the received date is different from the default value, enter a value for **Received Date**.
6. From the **Participant** list, select one or more participants that the data applies to.
7. Enter the new evidence record details.
8. Click one of the wizard's exit options, as outlined in the following table:

Option	
Save and Next	Saves the data and proceeds to the second page of the wizard.
Save and New	Saves the data and presents a new blank form to create multiple evidence records.
	Note: If **Save and New** is configured on the evidence type, the **Save and New** option is displayed on page one of the wizard only.
Save and Exit	Closes the wizard and saves the data on the page.
Cancel	Closes the wizard without saving the data.

9. In the second page of the wizard, choose one of the following options:

   - To continue without end dating any previous evidence records, do not select any evidence records and click **Finish**. No evidence records are end dated and the wizard closes.

   - To select previous evidence records for end dating, do the following substeps:

     a. Select the appropriate value for **Change Reason**.

     b. If the required value for the evidence end date is different from the default value, enter a value for **Evidence End Date**.

     c. Select one or more evidence records to apply the end date to. The evidence records that are displayed for selection for end dating are the most recent `active` or `in-edit` evidence records of that type, except for the evidence records that you created on the first page of the wizard. If an `active` evidence has an `in-edit` version, only the `in-edit` version is displayed.

     d. Click **Finish** to close the wizard and to save any data that has been entered into the page, or click **Cancel** to close the wizard without saving any data on the page. If you selected an evidence record but you didn't enter a value for **Change Reason**, **End Date**, or both values, when you click **Finish** a validation message is displayed.

Related concepts
New Evidence
Related tasks
Enabling the End Dating of Previous Evidence When Creating Evidence

Configuring evidence sharing

Create evidence sharing configurations where you specify exactly what evidence is shared between case types. Learn how to configure the XML sharing rules files for mapping evidence attributes in logically equivalent evidence sharing configurations. Configure the evidence maintenance patterns that are applied to evidence types.

Note: The redesigned evidence broker is enabled by default in IBM Cúram Social Program Management. To switch to using the previous version of the evidence broker, configure the curam.aes.advancedEvidenceSharingEnabled property:

1. Log on to the IBM Cúram Social Program Management application as a system administrator, and click **System Configurations**.
2. In the Shortcuts panel, click **Application Data** > **Property Administration**.
3. Search for `curam.aes.advancedEvidenceSharingEnabled`.
4. To switch to using the previous version of the evidence broker, set the value of curam.aes.advancedEvidenceSharingEnabled to NO. The default value of curam.aes.advancedEvidenceSharingEnabled is YES.

Creating sharing configurations

Use the sharing configuration wizard to configure the sharing of evidence from a source case type to a target case type. You can specify the types of identical evidence to be shared. You can also specify the sharing of logically equivalent evidence, by mapping evidence types on the source case to logically equivalent evidence types on the target case.

Before you begin

Ensure that the evidence types that you want to share between cases of a specific type are configured on those case types. For example, if you want to share addresses evidence from a person to an integrated case, ensure that the addresses evidence is administratively configured on the integrated case. Also, you must enable the relevant evidence types for sharing.

To configure the sharing of logically equivalent evidence, you must define the sharing rules for the logically equivalent evidence in an XML file. The sharing configuration wizard prompts you to upload an XML file for each set of logically equivalent evidence that you configure. For more information about the XML sharing rules file, see the related link.

Log on to the IBM Cúram Social Program Management application as an administrator, and click **Administration Workspace**.

About this task

Configure the sharing of only identical evidence, only logically equivalent evidence, or a combination of both identical and logically equivalent evidence.

To configure bidirectional evidence sharing between two case types, you must create a separate sharing configuration for each direction. For example, to share from integrated cases to application cases, and to also share from application cases to integrated cases, you must create the following configurations:

- A sharing configuration where integrated cases are the source case type and application cases are the target case type.
- A sharing configuration where application cases are the source case type and integrated cases are the target case type.

You must specify the following settings for each type of shared evidence:

Share Verifications
You can configure the broker to always share associated verification items, or only if they are used or required by the target case, as defined in any verification rules configurations. If the broker shares verification items to a target case and the verification requirements are the same between the source case and the target case, it is not necessary for the caseworker to reverify evidence that is already verified for the client.

Trusted Source

If you select **Yes** to indicate that the source is trusted, evidence from the specified source is shared to the target case and activated without the need for a caseworker to intervene. However, in some exceptional circumstances, caseworkers must review shared evidence, such as when a genuine conflict occurs between the information that is on the source case and on the target case. Trusted source is typically set to yes when an organization manages different case types but within the same line of business. For example, an organization has different teams who manage different integrated

cases for income support programs. Any change that is made to any case is considered to be trusted as the customers who provide the information liaise with the same business unit.

If you select **No** to indicate that the source is not trusted, the caseworker must always review and resolve the evidence that is shared from the specified source to the incoming evidence list. Organizations might decide to set trusted source to no when different types of business units exist who manage different circumstances for clients. For example, an organization has a team of caseworkers who manage all financial assistance programs, and a team of social workers who manage child welfare investigations. When an evidence change occurs on a financial assistance case and the evidence is shared to a child welfare case, social workers might be required to review the evidence before adding it to the case to assess how the evidence impacts their investigation.

Procedure

1. In the Shortcuts panel, click **Rules and Evidence** > **Evidence Sharing**.
2. Click the **Configurations** tab.
3. Click the ellipsis icon **...** in the upper right, and then click **New Sharing Configurations**.
4. Use the **New Sharing Configurations** wizard to create the sharing configuration:

   a) Select the source case type and the target case type.

   b) Add the identical evidence to be shared between the source and the target, if any.

   c) Add the logically equivalent evidence to be shared between the source and the target, if any.

Results

Sharing configurations are displayed on the **Configurations** tab, including details of the source, the target, and the types of evidence shared.

What to do next

On the **Configurations** tab, you can review and edit the sharing configurations. You can add and delete evidence, or delete an entire sharing configuration.

If you edit one or more sharing configurations, the changes become effective when the next evidence sharing trigger occurs. Therefore, if evidence sharing is triggered as a result of the activation of evidence, the evidence is shared in accordance with the updated sharing configurations. However, if evidence had already been triggered for sharing before updates to one or more sharing configurations were saved, the evidence is shared according to the sharing configurations that were in place at the time that the evidence sharing was triggered.

Related concepts
Defining logically equivalent evidence
The topics describe how you can analyze logically equivalent evidence and structure the flow of evidence if appropriate.

Related reference
XML sharing rules schema
The XML sharing rules schema provides the elements and attributes that you can use to define an XML sharing rules file for mapping logically equivalent evidence types.

Configuring evidence patterns

An evidence maintenance pattern is a set of rules and characteristics that you can apply to an evidence type. You can designate how to instantiate, correct, and succeed that evidence type. You can apply one evidence maintenance pattern to each evidence type.

Before you begin
Log on to the IBM Cúram Social Program Management application as an administrator, and click **Administration Workspace**.

About this task

The following procedure describes how to configure evidence maintenance patterns for both non-dynamic evidence and dynamic evidence. Non-dynamic evidence is also known as static evidence.

The default evidence maintenance pattern is multiple over time. It is applied to each evidence type unless you configure an alternative evidence maintenance pattern, where you configure the evidence maintenance pattern for each evidence type individually. For more information about the types of evidence patterns, see the related link.

Procedure

1. In the Shortcuts panel, click **Rules and Evidence**.
2. Click either **Non-Dynamic Evidence**, or **Dynamic Evidence**.
3. In the list of evidence types, locate the evidence type that you want to configure and in the row menu, click **Edit**.
4. In the evidence modal, select the appropriate evidence sharing maintenance pattern.

Related concepts

Evidence maintenance patterns
An evidence maintenance pattern enforces a set of evidence maintenance restrictions and behavior on evidence sharing that determines how an evidence type is instantiated, corrected, and succeeded. If a caseworker maintains evidence manually in the application, the same evidence maintenance restrictions and behavior are enforced through evidence validations. By applying an evidence pattern to each evidence type, an agency can ensure that evidence of a particular type is shared across cases according to a consistent set of rules.

Configuring logically equivalent evidence

To share data where the representation of the data's structure and format differs between source and target case types, you must configure a logically equivalent evidence sharing configuration. Map the evidence attributes to be shared between two case types through an XML rules file that also specifies other sharing actions. The XML rules file must adhere to an XML rules schema that is included in the evidence broker installation.

About this task

The following procedure outlines at a high level the process for creating the XML rules file. For more information about the associated XML schema and how to format the XML rules file, see the subsequent topics in this section.

When you upload an XML rules file through the sharing configuration wizard, the XML file is validated. If the validation fails, an error message is displayed that prompts you to correct the validation errors.

Procedure

- In the `EvidenceMapping` element, specify the source case evidence type and the target case evidence type.

Child elements of the `EvidenceMapping` element:

- In the `Mapping` element, map the source case evidence type attributes to the target case evidence type attributes.
- Optional: In the `Action` element, insert one or more of the following child elements to specify actions that the broker can apply to the shared logically equivalent evidence:

    Set
    Specify a `Set` action, for example, to populate default information on the target evidence record.

Display

Specify a `Display` action to place a shared logically equivalent evidence record in the caseworker's incoming list when the attributes on the target evidence record contain additional or changed information.

Create

Specify a `Create` action to create one or more child evidence instances on the target evidence record.

- Optional: In the `ShareWhen` element, specify rules that restrict when the logically equivalent evidence is shared.

- Optional: In the `Filter` element, specify one or more target evidence subtypes to restrict the sharing of the logically equivalent evidence to only those subtypes.

- Optional: In the `MaintenanceStyle` element, specify whether end dating as a succession style is in use for the target evidence in the sharing configuration.

Related concepts

Defining logically equivalent evidence
The topics describe how you can analyze logically equivalent evidence and structure the flow of evidence if appropriate.

XML sharing rules schema
The XML sharing rules schema provides the elements and attributes that you can use to define an XML sharing rules file for mapping logically equivalent evidence types.

XML schema structure

The XML schema for mapping logically equivalent evidence types contains the following elements:

```
EvidenceMapping
    Mapping
            CodeTableValue
    Filter
    Action
        Set
            Parameter
        Display
        Create
            Parameter
    MaintenanceStyle
    ShareWhen
            <<expression>>
```

Element attributes and code values

The element attribute values can contain a code table name or a code value that is included in a code table. The element attribute values can also contain evidence type attributes.

Selected element attributes are derived through a count method or a generate method. See the descriptions and examples in the tables for more information about the attribute values and how they are derived.

If you need to look up code table values, complete the following steps:

1. Log on to the IBM Cúram Social Program Management application as a system administrator, and click the **System Configurations** tab.

2. In the Shortcuts panel, click **Application Data** > **Code Tables**.

3. In the search criteria section, for **Name**, enter the name of a code table. For evidence type codes, use the EvidenceType code table name.

From the code tables that are displayed, you can expand the twistie and then display the name and technical ID of the evidence types. You can also refer to any other code tables, for example, DisabilityType and IncomeType and their code values. A range of code tables can also be displayed that matches the type of code table that you look up.

EvidenceMapping parent element

The `EvidenceMapping` parent element maps two logically equivalent evidence types through source and target attributes.

Table 5: EvidenceMapping element attributes		
Element	**Description**	**Example**
source	A required value that defines the source evidence type code.	*ET10097*, the evidence type code for paid employment.
target	A required value that defines the target evidence type code.	*DET0026030*, the evidence type code for income.

Mapping child element

The `Mapping` child element maps one source case evidence type attribute to a target case evidence type attribute. You add one `Mapping` element for each source and target attribute mapping. You can complete as many source and target attribute mappings as you want to share.

For any source and target attribute mapping, optionally you can include a source code table name and a target code table name. The code table and its code values map the specified attribute. See the `CodeTableValue` child element for mapping individual code table values that belong to the specified code tables.

Table 6: Mapping child element attributes		
Attribute	**Description**	**Example**
source	A required value that defines the source evidence type attribute.	*participantID*, *disabilityType* are evidence attributes.
sourceLookUp	A value that is required when you map a case participant source attribute that is of data type to a target attribute that is of string type. The value contains a participant property, such as a name or a description. The value of the target attribute is populated from this attribute.	*name*, an attribute from the paid employment evidence type, for mapping an income support case to an insurance affordability case.
target	A required value that defines the target evidence type attribute.	*caseParticipantRoleID*, *disabilityType* are evidence attributes.
sourceCodeTable	An optional value that defines a source code table name if you want to map a code table and some or all of its values for the source attribute. If you define a source code table, you must define a target code table to complete the mapping.	*DisabilityType*, a code table for disability types.

Table 6: Mapping child element attributes (continued)		
Attribute	**Description**	**Example**
targetCodeTable	An optional value that defines a target code table name if you want to map a code table and some or all of its values for the target attribute. If you define a target code table, a source code table is required.	*DisabilityType*, a code table for disability types.

CodeTableValue child element

If the source and target attributes that are specified in the Mapping element are code tables, the attribute mapping is completed by entering the code values for the code table specified. You can map the codes in the CodeTableValue child element by adding source and target code table values. If you are sharing all the code table values between the source and target, you map all the values. If only a subset of the code table values is mapped, then you specify only these values.

Table 7: CodeTableValue attributes		
Attribute	**Description**	**Example**
source	A required value that specifies the source code value from the code table that maps the source and target evidence attribute.	*SAS26302*, an attribute value for the code table *HCSSNApplicationStatus*.
target	A required value that specifies the target code value from the code table that maps the source and target evidence attribute.	*SAS2*, an attribute value for the code table *SSNApplicationStatus*.

Filter child element

The optional Filter child element specifies one target evidence subtype to restrict the sharing of the logically equivalent evidence to only those subtypes. You can specify only one filter in each XML configuration file.

Table 8: Filter child element attributes		
Attribute	**Description**	**Example**
evidence	A required value that specifies the evidence type code where evidence subtypes are in use.	*PDC0000259*, the evidence type code for identifications.
attribute	A required value that specifies the evidence subtype from the evidence type.	*altIDType*, an attribute on the evidence type that can filter the identifications evidence type.
codeTableName	A required value that specifies the name of the code table in use for referencing the evidence subtype.	*ConcernRoleAlternateID*, a code table.
codeTableValue	A required value that specifies the value on the code table in use for referencing the evidence subtype.	*CA1*, the social security number on the *ConcernRoleAlternateID* code table.

For example, a person identification evidence type has a type attribute that specifies one of many different subtypes, such as social security number, passport number, driving license and other identifications. If you share an integrated case social security number evidence type to a person identification evidence type, it does not make sense to share a social security number to an identification evidence record that has a subtype of passport number. In such scenarios, you can use the `Filter` element to match only against the evidence subtype that is specified in the filter. Therefore, in the previous example, you want to filter only against social security numbers.

`Action` child element

The optional `Action` child element adds one or more child elements to specify actions that the broker applies to the shared logically equivalent evidence:

Set child element

The optional `Set` child element specifies a set action on the target evidence, for example, to populate default information. Specify an evidence attribute on the target evidence by using the `Set` child element. You can configure only one `Set` action in each configuration file.

Table 9: Set child element attributes

Attribute	Description	Example
type	The target evidence type code where the `Set` action takes place.	*DET0026030*, the evidence type code for income.

Parameter child element

You must define at least one `Parameter` child element for each `Set` element. Each `Parameter` child element defines the attribute to be set on the target evidence. You can enter more than one `Parameter` child element.

Table 10: Parameter child element attributes for the Set element

Attribute	Description	Example
name	A required value that specifies the name of the attribute to be set on the target evidence.	*seasonalIncomeInd*, an evidence attribute, taken from the Income evidence type.
tableName	An optional value if the type entry is CODETABLE. The complete code table name is entered for the type. A code value is then set for the code table. See value.	*HCIncomeSource*, a code table.
type	A required value that specifies the type of attribute for which an action is being set on the target evidence, where valid values are: STRING, for a string entry, CODETABLE, for a code table, see tableName, COUNT, see countInstance.	*CODETABLE*, the type to indicate that you are setting a code table name and value.
value	A required value that is given to the attribute and to be set on the target evidence.	*HCIS01*, a code table value for the code table *HCIncomeSource*.

Table 10: Parameter child element attributes for the Set element (continued)		
Attribute	**Description**	**Example**
countInstance	An optional value if the type entry is COUNT. Specify the child evidence type that links to the source parent evidence instance. The instances of the specified child evidence type are counted. The result is placed on the target evidence type.	*ET10125*, the child evidence type code for unborn child. The child evidence is coupled to a parent pregnancy evidence type on an income support case.

Display child element

The optional `Display` child element specifies an action that places a shared logically equivalent evidence record in the caseworker's incoming list when the specified source attribute changes and the unmapped attributes on the target evidence record contain anything other than default values. Examples of default values are 0 for an integer, 0.00 for an amount, or the default code for a code table attribute. For example, if the value of an attribute that indicates a disability type is changing, the values of the other attributes on the target evidence record might not make sense in the context of the shared evidence record. In such a scenario, a caseworker must manually review and process the shared evidence record. You can configure only one `Display` action in each configuration file.

Table 11: Display child element attributes		
Attribute	**Description**	**Example**
changedType	A required value that specifies an evidence type on the source case. A change in the value of a specified attribute on the evidence type initiates a manual caseworker review.	*DET0026010*, the evidence type code for disability.
changedAttr	A required value that specifies an evidence attribute on the source case. A change in the attribute value initiates a manual caseworker review.	*disabilityType*, the type of disability taken from a code table.

Create child element action

The optional `Create` child element specifies an action that creates one or more child evidence instances on the target evidence record. You can configure only one `Create` action in each configuration file.

Table 12: Create child element attributes		
Attribute	**Description**	**Example**
instancetype	A required value that specifies the target child evidence type that is created for the parent evidence type.	*ET10125*, the evidence type code for unborn child, on an income support case. The unborn child evidence type is coupled to a parent pregnancy evidence type on an income support case.

Table 12: Create child element attributes (continued)		
Attribute	**Description**	**Example**
reftype	A required value that specifies an evidence type on the source case, where one of the evidence type's attributes contains the number of child evidence instances to be created.	*DET0026008*, the evidence type code for pregnancy, on an insurance affordability case. The pregnancy evidence type is stand-alone for an insurance affordability case.
refattr	A required value that specifies an attribute in the reftype evidence on the source case that contains the number of child evidence instances to be created.	*noOfUnborn*, the attribute on the pregnancy evidence type for an insurance affordability case that contains the number of child evidence types to be created.

`Parameter` child element

Define one `Parameter` child element for each child evidence instance that is to be created on the target evidence record. Each `Parameter` element defines the attributes of the evidence instance.

Table 13: Parameter child element attributes for the Create element		
Attribute	**Description**	**Example**
name	A required attribute that specifies the name of an attribute on the created child evidence instance.	*comments*, the name of the created child evidence instance attribute.
type	A required attribute to specify the type of attribute that you are creating or how you set the attribute on the child evidence instance. Use the type STRING if you want to specify a value for the named attribute. See value. Use the type GENERATE if you want to generate a new value for the named attribute on the child evidence. The use of the GENERATE type creates a case participant role ID that allows a child evidence to be referenced by the parent evidence.	*STRING*, one of the available types to set the attribute.
value	An optional attribute that specifies the value of the attribute on the created child evidence instance. This attribute is used only with type STRING.	*BABY*, a STRING value for the created child evidence instance attribute.

MaintenanceStyle child element

Use the optional `MaintenanceStyle` element to indicate that end dating is the style of evidence succession in use for the target evidence in the sharing configuration. For a sharing configuration that uses the `MaintenanceStyle` element, the existing target evidence record is given an end date and a new evidence record is created on the target with its start date determined by the effective date that is entered on the source. Make only one setting per XML configuration file.

The `MaintenanceStyle` element has one value of *ENDDATE* in the configuration file:

```
<MaintenanceStyle>ENDDATE</MaintenanceStyle>
```

ShareWhen child element

Use the optional `ShareWhen` element to define extra conditions that restrict when logically equivalent evidence is shared. You can define one `ShareWhen` element per XML configuration file.

Define an expression within the `ShareWhen` element, where the evidence is shared if the expression evaluates to true. You can define multiple conditions within `Rule` elements, and then apply And and `Or` elements to combine the `Rule` elements into one expression.

The following example shows an expression that indicates a range of benefit types that can apply before sharing takes place. The dynamic evidence type is benefit DET0026014, and the benefit type code options represent the selected benefit types Medicaid, Medicare Part A, Medicare Part B, and State Supplementary.

```
<OR>
          <Rule> "DET0026014.benefitType" == "HCBT26308" </Rule>
          <OR>
              <Rule> "DET0026014.benefitType" == "HCBT26309" </
Rule>
                  <OR>
                      <Rule> "DET0026014.benefitType" == "HCBT26310" </
Rule>
                          <OR>
                              <Rule> "DET0026014.benefitType" ==
"HCBT26319" </Rule>
                          </OR>
                  </OR>
          </OR>
      </OR>
```

Related concepts

Defining logically equivalent evidence
The topics describe how you can analyze logically equivalent evidence and structure the flow of evidence if appropriate.

Supported actions and data structures
You can apply several instructions or actions to evidence types to complete the flow of evidence across IBM Cúram Social Program Management source and target cases for logically equivalent evidence. You might also want to consider the data structures for evidence types on source and target cases.

Related tasks

Creating sharing configurations
Use the sharing configuration wizard to configure the sharing of evidence from a source case type to a target case type. You can specify the types of identical evidence to be shared. You can also specify the sharing of logically equivalent evidence, by mapping evidence types on the source case to logically equivalent evidence types on the target case.

Related reference

Evidence analysis

If you consider that data is logically equivalent, then you need to conduct an analysis of the data. The analysis includes looking at the underlying data structure and an initial reassessment of how the structures might potentially map to each other.

Sharing rules XML samples
The sharing rules XML samples provide guidelines on how to use the sharing rules XML schema to map logically equivalent evidence types.

The default IBM Cúram Social Program Management installation provides some predefined Income Support and Insurance Affordability sharing configurations that map logically equivalent evidence with XML. The XML configuration samples are available on DeveloperWorks. You can review and customize these samples according to your requirements. See the related link.

You can review the sharing configurations in the administrative application under **Rules and Evidence** > **Evidence Sharing** > **Configurations**. For each sharing configuration that shares logically equivalent evidence, you can select an option to view the associated sharing rules XML.

Related concepts
Defining logically equivalent evidence
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Related reference
Evidence analysis
If you consider that data is logically equivalent, then you need to conduct an analysis of the data. The analysis includes looking at the underlying data structure and an initial reassessment of how the structures might potentially map to each other.

Related information
Cúram on developerWorks

Troubleshooting evidence sharing errors

For seamless sharing configurations, the system attempts to deliver and activate evidence records to a target case. Resilience in the evidence flow ensures that if the system cannot deliver or activate evidence records to the target case, alternative processing options are applied to the evidence records.

The system applies the following rules to handle evidence flow errors:

- If the target case cannot accept any evidence record on delivery of a set of evidence to a target case, all the evidence records that are within the associated set of data are added to the caseworker's incoming evidence list.
- If the system cannot activate any evidence record on delivery of a set of evidence to a target case, then the evidence remains in an in-edit state and a task is raised for the relevant caseworker.

Evidence validation and verification failures can prevent seamless sharing. A diagnostic tool is provided in the evidence broker installation to help identify sharing problems.

Evidence validations and verifications

When the broker shares evidence to a target case, the system triggers validation and verification checks on the individual evidence types. The checks ensure that evidence that the broker adds to the target case maintains the data integrity that is required for the case.

Validation or verification requirements can differ across case types. However, evidence types can be configured against any case type. When the broker attempts to add evidence to a target case by either

inserting, modifying, or removing a set of evidence records, the system triggers the validations and verifications that are specific to the case type.

The system applies the following rules to handle validation and verification failures:

- If any validations or verifications prevent the target case from accepting any evidence record on delivery of a set of evidence to a target case, all the evidence records that are within the associated set of data are added to the caseworker's incoming evidence list. The caseworker must manually review and process the evidence records.
- If any validations or verifications prevent the system from activating any evidence record on delivery of a set of evidence to a target case, all the evidence records that are within the associated set of data remain on the in-edit evidence list.

Validation and verification processing examples

The following scenarios show examples of how the system processes validations and verifications for shared evidence records.

Validations for shared evidence records are applied to the target case

For example, an administrator has set up a sharing configuration to share between income support integrated cases for the following evidence types: absent parent, absent parent child support, child support enforcement, and absenteeism. Each evidence type is configured as a trusted source on the target case.

A caseworker creates income support integrated case 1, and adds Linda as the primary client, John as a case participant, and Ann as a case member. The caseworker activates the following evidence records on the case:

- An absent parent evidence record for John, that specifies Ann as the child
- A child support enforcement evidence record that specifies Linda and Ann
- An absenteeism evidence record, which links John's absent parent evidence record and the child support enforcement record for Linda and Ann

A caseworker creates income support integrated case 2, and adds John as the primary client, and Linda and Ann as case members. However, a validation rule on the absent parent evidence specifies that an absent parent must not be a household member. Therefore, the broker adds the shared evidence records from income support integrated case 1 to the caseworker's incoming list for income support integrated case 2 for manual review and processing.

Verifications are triggered when verification requirements are different for a source and target case

For example, an administrator has set up a sharing configuration to share between insurance affordability application cases and Insurance Affordability integrated cases for the income evidence type. The income evidence type is configured as a trusted source and share verifications is set to always on the target case. The following verifications are configured:

- On Insurance Affordability application cases, income evidence records require an employer statement and tax records as verification items.
- On Insurance Affordability integrated cases, income evidence records require employment records and a birth certificate as verification items.

A caseworker adds John as the primary client on both an Insurance Affordability application case and a related Insurance Affordability integrated case. The caseworker activates income evidence on the application case for John, and associated verifications are resolved on the application case.

After activation, the broker shares the income evidence to the related integrated case, but the income evidence is unverified on the integrated case. Because the verification requirements are different on the target integrated case when compared to the source application case, the broker adds the income evidence to the caseworker's incoming verifications list on the target integrated case.

Related concepts

Verification items

By default, the broker does not share verification items that are associated with an evidence record to a target case. However, an administrator can configure the evidence broker to share verification items that are associated with either identical or logically equivalent evidence, as well as the evidence that is being shared to the target case.

Searching for shared instances

You can analyze how evidence has been shared around a system by searching for all instances of evidence sharing that have occurred on a particular case or are currently in progress between cases. Use the shared instances search to analyze any sharing problems that might occur. The shared instances search provides details about the evidence broker's decision for each evidence record that it shares.

Before you begin
Log on to the IBM Cúram Social Program Management application as an administrator, and click **Administration Workspace**.

About this task

You can search on either a case reference or a person reference to review the details of all related sharing instances that have either been completed or are in progress. The table displays the date and time that the sharing instance was first initiated, the source and target case references, and the status of the sharing instance.

Procedure

1. In the Shortcuts panel, click **Rules and Evidence** > **Evidence Sharing**.
2. Click **Search Shared Instances**.
3. Search for either a case reference, or a person reference.
   A table is displayed that contains a row for each evidence record that is shared to and from the case.
4. Expand each row in the table to view a graphical representation of how the corresponding evidence record is shared between cases.

   All cases that are involved in the sharing instance are indicated by a circular icon, including the source case, the target case, and any other intermediate cases through which the evidence is shared. Hover over a case icon to view information about the type of evidence that is being shared and the system action that completed by the broker. The following table summarizes the possible system action values:

Table 14: System actions recommended by the broker	
System action recommended or completed by the broker	**Description**
CANCELED_NOT_ON_TARGET	Ignore the shared evidence record because the broker has determined that the record that was removed on the source case does not exist on the target case.
CASEWORKER_REVIEW	The sharing configuration requires a caseworker to manually review and process the shared evidence record; for example, the evidence record is not from a trusted source, or either validation or verification requirements differ between the source and target cases.

Table 14: System actions recommended by the broker (continued)	
System action recommended or completed by the broker	**Description**
CORRECT_LINK	The broker has determined that an evidence record on the target case is to be corrected with the incoming evidence from the source case. The LINK status indicates that the broker will remember that the two records are the same in the future, and will synchronize any corrections that are made to either record.
CORRECT_LINKED	The broker has determined that an evidence record on the target case is to be corrected with the incoming evidence from the source case. The LINKED status indicates that the broker remembers that the two records were previously matched, and therefore bypasses the need to perform complex data matching.
EVIDENCE_AND_MEMBER_PARTICIPANT_PERIOD_DONT_OVERLAP	Ignore the shared evidence record because the period that it applies to does not overlap with the period that applies to members and participants on the target case.
IGNORE_LINK	Ignore and link the shared evidence record. The broker has determined that the evidence record on the source case is already on the target case. The LINK status indicates that the broker will remember that the two records are the same in the future, and will synchronize any corrections that are made to either record.
IGNORE_LINKED	Ignore the shared evidence record. The broker has determined that the evidence record on the source case is already on the target case. The LINKED status indicates that the broker remembers that the two records were previously matched, and therefore bypasses the need to perform complex data matching.
IGNORE_LINKED_DUPLICATE	Ignore the shared evidence record, because the evidence record has already been shared to the target case.
IGNORE_NO_TARGET_EVIDENCE_DURING_PULL_PROCESS	Ignore the shared evidence record because it was detected, during the data pulling process, that the evidence record already exists on the target case.
IGNORE_RECIPROCAL_TARGET	Ignore the shared evidence record. The target is the person case of the related participant on the relationship evidence that is being shared. A separate evidence record has been shared to the primary participant's person case, which will generate reciprocal relationship evidence on the related participant's person case.

Table 14: System actions recommended by the broker (continued)	
System action recommended or completed by the broker	**Description**
INSERT	Insert and link the shared evidence record onto the target case. The broker has determined that the evidence record should be inserted onto the target case.
MANUAL_INTERVENTION	Requires manual review and processing by a caseworker. After performing complex data matching, the evidence broker could not determine what action to take.
MODIFY_LINK	Modify and link the evidence record on the target case. The LINK status indicates that the broker will remember that the two records are the same in the future, and will synchronize any corrections that are made to either record.
PARTICIPANT_NOT_ON_CASE	Ignore the shared evidence record because the participant that it relates to is not active on the target case.
REMOVE_LINKED	Remove the shared evidence record from the target case. The LINKED status indicates that the broker remembers that the two records were previously matched, and therefore bypasses the need to perform complex data matching.

Enabling the evidence sharing trace

If an evidence sharing error occurs, use the shared instance search to investigate possible errors in the sharing flow. However, if sufficient troubleshooting information is not available from the shared instance search, you can enable the evidence sharing trace. The evidence sharing trace records each step of the evidence broker's sharing process in a detailed log.

Before you begin

Use the evidence sharing trace to troubleshoot an evidence sharing error only if you cannot get the required information by using the shared instance search.

Log on to the IBM Cúram Social Program Management application as a system administrator, and click **System Configurations**.

About this task
To enable an evidence sharing trace, use the following procedure.

Procedure

1. In the Shortcuts panel, click **Application Data** > **Property Administration**.
2. Search for `curam.aes.advancedEvidenceSharingTrace`.
3. Set the value of curam.aes.advancedEvidenceSharingTrace to YES. The default value of curam.aes.advancedEvidenceSharingTrace is NO.

What to do next
Review the evidence sharing trace in the system log files.

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