

IBM Cúram Social Program Management  
8.0.2

*Reviewing and Processing Evidence*



**Note**

Before using this information and the product it supports, read the information in [“Notices” on page 10](#)

**Edition**

This edition applies to IBM® Cúram Social Program Management 8.0.0, 8.0.1, and 8.0.2.

Licensed Materials - Property of IBM.

© **Copyright International Business Machines Corporation 2012, 2022.**

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

---

# Contents

<b>Chapter 1. Reviewing and processing evidence.....</b>	<b>1</b>
Evidence lists.....	1
Evidence views.....	2
Maintaining evidence.....	3
New evidence.....	3
Modifying evidence.....	5
Removing active evidence.....	6
Discarding In-Edit evidence.....	6
Validating evidence changes.....	6
Applying evidence changes.....	6
Updating evidence for multiple participants.....	7
<b>Notices.....</b>	<b>10</b>
Privacy Policy considerations.....	11
Trademarks.....	11



---

# Chapter 1. Reviewing and processing evidence

Depending on the information that caseworkers require, caseworkers can use different evidence views. For example, to identify high-level or specific details. The evidence views are not determined by whether the evidence is designed as static or dynamic or whether the data is in a hierarchy.

## Evidence lists

---

The evidence framework provides several evidence lists for managing evidence. To manage person and prospect person evidence, you can use the person tab evidence list. To manage application evidence, you can use the application evidence list and the incoming evidence list. To manage evidence records, you can use the evidence type list, the active evidence list, the in edit evidence list, and the incoming evidence list.

Evidence is displayed in the same format for each list. Summary information is provided for each individual evidence record for a person including the period of time for which the evidence is applicable, the number of updates that have been recorded, and the latest activity on the evidence. A second list within each evidence record provides a history of the successive changes to it over time. The details that are displayed include the period over which the change is effective and the reason that a change has been recorded, as well as the date, time, and user who made the change.

### Person tab evidence list

The person tab evidence list provides caseworkers with a view of all the evidence types that are configured for a person or prospect person. Caseworkers can view, update, and delete evidence records from the list. Person and prospect person evidence is automatically activated when you save it on the person tab, hence only one list of evidence is required. The person tab evidence list displays the source of the evidence. The source indicates where the evidence was added or modified and displays either the person record, the prospect record, or the individual case reference. The evidence records that are listed always summarize the latest record. When you expand the list, details of the latest update are displayed.

### Application evidence list

The application evidence list provides caseworkers with a view of all evidence in relation to a person or prospect person on an application. Caseworkers can view, update, and delete evidence records from the list. The application evidence list contains both the in edit and active evidence for the application.

### Evidence type list

The evidence type list provides caseworkers with a central point for maintaining evidence of a particular type by displaying all evidence, verifications and issues for a single evidence type. Caseworkers can view, discard, and delete evidence records from the list, and they can also update evidence records in the list if the evidence is not configured to be read only. Caseworkers can undo pending updates and removals in the list, if necessary.

Unlike other evidence list pages, the evidence type list opens in a new tab. By default, deleted evidence is not displayed in the evidence type list. To view deleted evidence in the evidence type list view, configure the application property to display deleted evidence. If deleted evidence is displayed, you cannot edit it.

### Active evidence list

The active evidence list provides caseworkers with a view of all active evidence on a case, including parent and child evidence. Caseworkers can view and delete evidence records from the list, and they can also update evidence records in the list if the evidence is not configured to be read only. Also, caseworkers can discard pending updates and undo pending removals that are set on active evidence records.

### **In edit evidence list**

The in edit evidence list provides caseworkers with a view of all in edit evidence on a case. Caseworkers can view, edit, and discard in edit evidence records from the list. By default, the in edit evidence list displays all of a case's in edit evidence records, including parent and child evidence.

### **Incoming evidence**

The incoming evidence list provides users with a list of evidence that has been shared from other systems and cases to the current case. Caseworkers can compare shared evidence to existing evidence on the case, and caseworkers can use the actions that are provided to resolve the evidence onto the case.

Evidence can be shared only if the Evidence Broker is installed. For more information, see the *Evidence Broker* section.

### **Verifications list**

The verifications list displays all of the verifications, both outstanding and captured, that are currently associated with participant or evidence records. Caseworkers can view the outstanding verifications and add a verification item to verify. Caseworkers can view all verifications that have been captured either in the participant manager or on the case. Caseworkers can also view and manage evidence verifications for a particular evidence type at the individual evidence type level.

Verifications are available only if the IBM Cúram Verification Engine is installed. For more information about the functionality that is available for managing evidence verifications, see the *Cúram Verification Guide*.

### **Issues list**

The issues list displays all of the issues that are currently associated with the evidence that is on the case. Caseworkers can use the list to resolve issues. The evidence issues are determined by the advisor, a dynamic tool that provides context sensitive tips and reminders to caseworkers throughout the intake process. For more information about the advisor, see the *Advisor* related link.

### **Related concepts**

[Advisor](#)

## **Evidence views**

---

A caseworker can view evidence at a case level in a dashboard view. Additional views are available at the evidence type and individual evidence business object level. The evidence business object view opens in its own tab. In the tab, you can click on the description of a particular address or income and see all evidence changes together for that one item, such as any successions, corrections, verifications or issues.

### **Dashboard view**

The dashboard view provides a summary display of evidence for a case. The dashboard shows evidence by category to help a caseworker to locate individual evidence types. Further information is available including whether any evidence is in edit, any outstanding verifications, or any issues for each evidence type. Each category offers additional flexibility for a caseworker, who can filter and sort the evidence according to the following criteria:

- All the evidence types that have been configured for the category on a case
- All evidence that has been recorded for the category

Evidence is displayed on the dashboard alphabetically and vertically within each category. Child evidence is displayed as indented and italicized and is always displayed under its associated parent evidence. When an evidence type is recorded, it is displayed as a hyperlink on the evidence dashboard. Child evidence types that are common to multiple parent records are shown as recorded underneath the parent with which they are associated. Caseworkers can quickly add an evidence record by clicking the plus icon that is displayed when they hover over the evidence name that they want to add.

## Dashboard groups

You can create evidence dashboard groups to help users perform a specific evidence maintenance task. If an evidence dashboard group has been configured on a case, then the user can select it through the Display Evidence Group combination box on the evidence dashboard. When you select a dashboard group, the evidence dashboard is filtered so that it displays only the evidence types that belonging to the selected group. Evidence types that have an asterisk are required as part of the evidence group. Evidence types that are flagged as required are used to prompt the user that the evidence type should be entered as part of the task this evidence group relates to. No validation error occurs if a required evidence type is not recorded for an evidence group.

## Evidence object view

A view is provided for each evidence object that displays the latest details for the evidence and lists the successive changes to the object over time. Any additional data that relates to the evidence object is available; if the evidence is a parent then a list of related child evidence is displayed, one list for each child evidence type. For example, income evidence is a parent of income usage evidence. A caseworker who views income evidence can view a list of income usage evidences that relate to the income evidence.

If an evidence type is a child, the parent evidence is listed. If an evidence type is a grandchild, only the child evidence is displayed and not the parent evidence, because the related evidences are available to one level of relationship. For example, parent to child constitutes one level, and child to grandchild constitutes two levels.

## View evidence

The view evidence page enables a caseworker to view all the evidence details for a specific evidence record. A caseworker can also view a list of evidence corrections for the evidence record.

# Maintaining evidence

---

A caseworker has several options for maintaining evidence at the person tab, case, evidence type, and individual evidence object level. The maintenance functions standardize evidence maintenance across all evidence types.

For information about how to approve evidence, and how to transfer evidence from one case to another, see the related links.

## Related concepts

[How are changes to evidence approved?](#)

[Can evidence be copied from one case to another?](#)

## New evidence

A caseworker can use the new evidence function to capture evidence information for an evidence type.

## Creating new evidence

Caseworkers can create evidence in the following two ways:

- Clicking the plus icon that is displayed when the caseworker hovers over the evidence name to which to add.
- Clicking **New evidence...** from the applicable evidence tab level. For example, from the Person, Case, or Application evidence tab level.

Caseworkers cannot create a new evidence record for evidence types that are configured as read-only. However, as a result of evidence brokering, read-only evidence records might be present on the case, the person, or the prospect person.

While the caseworker is creating child evidence, a caseworker can select the parent evidence record. The system automatically creates a parent-child relationship between the two evidence records.

When a caseworker saves the evidence information, the system validates the information that the caseworker entered. An administrator can customize the validations to match the business requirements for an evidence type.

To enable greater flexibility in gathering evidence and to allow information to be reviewed before it is activated, a newly created evidence record has a status of in-edit and the record is not yet used for assessment purposes.

## End-dating previous evidence when caseworkers create evidence records

When a caseworker creates evidence, a caseworker can configure an evidence type so that evidence of the same type can be ended when a caseworker creates new evidence. For example, a customer informs an organization of a new address. Typically, caseworkers end the customer's existing evidence and caseworkers create a new evidence of the same type. However, the processes of ending existing evidence and creating a new evidence of the same type can be integrated into a single process. The result is that the single process is easier and more intuitive for the caseworker to complete.

When suitable evidence is configured and the criteria are met, the caseworker can end date evidence records when a new record of the same evidence type is created. The feature applies to both dynamic and non-dynamic evidence.

Administrators can enable the ending of previous evidence when caseworkers create evidence records for various evidence types, when the evidence matches the following criteria:

- The evidence has a business end date attribute, and the end date is the only mandatory attribute that must be populated to end date the evidence. For example, if the evidence requires other mandatory information to be populated to end date the evidence, such as comments, then the evidence is not suitable.
- The existing evidence creation step does not have a two-page modal, for example, parent-child.

The evidence end dating feature is enabled by default for suitable person evidence, for example, addresses and phone numbers. For information about whether the evidence end dating feature is enabled on other types of evidence, see the related link to the *Cúram Participant Guide Evidence* section, and review the appropriate topic. Administrators can enable the evidence end dating feature on other evidence types, including custom evidence types, as required.

When a caseworker creates evidence, a two-page wizard is displayed to the caseworker only when the three following conditions apply:

- In the administrative settings, an administrator configured the evidence type to enable ending evidence while the administrator creates new evidence.
- Existing active and in-edit evidence records of the same type already exist for a person or a case.
- The evidence type has a business end date attribute.

For information about configuring an evidence type to end date an existing evidence record when a caseworker is creating an evidence record, see the *Enabling the end dating of previous evidence when creating evidence* related link.

## Evidence with a Preferred Indicator

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.

### Related tasks

[Enabling the end dating of previous evidence when creating evidence](#)



## Modifying evidence

The modify evidence function allows users to update person and prospect person and evidence records that are not configured as read only. The evidence information that can be modified is specific to the evidence type.

Person and prospect person evidence types that are maintained on a case are considered evidence records, and are maintained by using the evidence modification process for that case.

When evidence updates are saved, the system validates the evidence information. The validations for modifying evidence can differ from the validations applied when adding new evidence (even when changing the same information). For an evidence record that is awaiting case supervisor approval, a special validation warns the user of the pending approval. Evidence records that have been approved by the case supervisor but have not yet been activated cannot be modified. Modifications to person / prospect person evidence on the person tab evidence do not require approval as this evidence is automatically activated when saved.

Evidence records operate differently to person / prospect person evidence on the person tab when modified. When a user updates an active evidence record, the modifications are not automatically applied. Instead, a new, in edit evidence record is created with the modifications. The purpose of this record is to allow users to work on the evidence updates without impacting case processing as the active evidence remains intact. When an in edit evidence record is updated, the modifications are automatically applied to the existing evidence record. The in edit function does not apply to person / prospect person evidence on the person tab. Active evidence records modified at the person tab level are automatically updated on modification.

Two types of evidence changes can be made to evidence: evidence corrections and changes in circumstance. When person / prospect person evidence on the person tab is corrected, the corrected evidence record will automatically supersede the existing active record. When an evidence record is corrected, an in edit evidence record with the corrections will supersede the active evidence record as part of the apply evidence changes process. A change in circumstance does not replace existing active evidence as the original evidence was correct for a given period of time but the new circumstance applies to the next period of time. For evidence records, an in edit evidence record which includes the changes in circumstance is created and activated in its own right.

For changes in circumstances, the effective date of change indicates the date on which the change in circumstances is effective. For example, the income amount for an income evidence record might go from 100 to 90. The effective date is the date on which the income amount was reduced. This style of evidence represents an evidence record that has a continuous timeline. For example, an income evidence may capture the details of the employer and the weekly amount of income the client receives. While the client is employed by that employer, the income may vary over time. On week 1 the income may be 40, on week 2, the income may be 100, week 3, 0 and week 4, back to 40 again. While on one of the weeks the income is '0', the client was still employed. Using 'effective date of change' would record each change in succession over the four week period. If however the client was no longer employed by that employer, the income record would be ended. If at a later date the client was employed once again by the same employer, a new income record would be created. This allows the user to see the income received for each instance the customer was employed.

When making an evidence correction, the effective date of change should not be entered and on some evidence types, particularly where 'from' dates are used, this option may not be available. The corrected record automatically applies to the same period as the active evidence record. For example, if an incorrect date of birth is recorded for a person, the caseworker can update the persons birth and death evidence and correct the date of birth. Typically bank account, birth and death, email address, identification, phone number, and relationships evidence types do not change over time. Therefore any modifications to these evidence types is a correction.

When a modified person / prospect person evidence record is saved all cases that use this modified evidence is then reassessed.

## Removing active evidence

You can use the delete active evidence maintenance function to mark an active evidence record as pending deletion.

It is important to note that this function does not actually delete the active evidence record. If the active evidence record is already marked as pending update, then it cannot be marked as pending deletion. Additionally, active evidence that is itself a parent of an active child evidence record cannot be marked as pending deletion.

The deletion of evidence is not complete until the pending deletion change is applied. To complete the deletion of evidence, the caseworker must click **Apply changes**. Pending deletion evidence remains active and is used in eligibility and entitlement until the deletion is complete. When evidence deletion is applied, the status of the evidence changes to Canceled. When the status of the evidence changes to Canceled, the evidence is not used in eligibility and entitlement.

Active person or prospect person evidence can be deleted from the person tab. If a person or prospect person evidence record is selected for deletion, it is removed from the person tab evidence list. Deleting active person or prospect person evidence in the person tab that is used as part of an integrated case, causes all product delivery cases in the integrated case that use this evidence, to be reassessed.

## Discarding In-Edit evidence

The discard In-Edit evidence record maintenance function discards an evidence record that has an In-Edit status.

As In-Edit evidence records are not used for eligibility and entitlement, the functionality to remove In-Edit evidence records is much simpler.

**Note:** An evidence record that is approved by a case supervisor but is not yet activated cannot be discarded.

## Validating evidence changes

The validate evidence record changes maintenance function enables a user to validate evidence changes for an evidence type. It is a pretest of the apply evidence changes maintenance function for a specific evidence type.

Because evidence changes can be applied across any number of evidence types simultaneously, it can be difficult for a user to find and correct all errors that have occurred. Pretesting enables a user to test the evidence changes for only one evidence type and correct the changes before the changes are actually applied.

## Applying evidence changes

The apply evidence changes maintenance function enables users to both activate new and updated evidence, and to remove or cancel active evidence that is pending removal.

A user can enact evidence changes by applying all outstanding changes or by selecting specific changes to apply from the complete list of pending changes for a case.

The following five changes occur when a user applies evidence changes:

- The system validates the evidence changes at both the case level and the evidence type level. This ensures that the business requirements that are defined by the evidence type are met as are any additional business requirements at the case level. For example, validations that are applied at the case level can ensure that parent-child relationships are protected.
- The system checks if evidence approval is required. If so, the system notifies the case supervisor with instructions to approve or reject the evidence changes and the apply evidence changes process is put on hold until approved. If case supervisor approval is not required, the apply evidence changes process continues accordingly.
- For evidence corrections, the existing active evidence record is superseded.

- The system cancels active evidence that is pending removal. The canceled evidence is no longer used for assessment purposes.
- The system assesses each case that is impacted by the evidence changes to determine whether these changes impacted case eligibility and entitlement.

## Differences between using Cúram Express Rules (CER) and using Cúram Rules

The proceeding applies only to customers who are using Cúram Rules. The proceeding does not apply to customers who are using Cúram Express Rules (CER) because in CER the changes are included in the timeline that CER builds.

When a user applies evidence changes, the system activates in-edit evidence records and calculates the attribution periods for the newly activated evidence. The newly activated evidence is used for assessment purposes. For changes in circumstance, the system re-attributes all evidence records within the set of successive changes to the same piece of active evidence. The system uses the attribution periods for a case to determine the assessment period. The earliest attribution period from date and the latest attribution period end date are set as the assessment period. For CER, the assessment period is incorporated into the timeline.

## Hook point

A hook point is provided that enables an agency to automate this functions, allowing an agency to automatically apply evidence changes rather than a user who must do this manually. This means that when an active evidence record is updated and a new in-edit version of the active record is created, it is automatically activated so that it supersedes the existing active evidence record. For an evidence removal, the evidence record is automatically canceled rather than being marked as pending removal.

## Updating evidence for multiple participants

The goal of the multiple participant evidence update is to make it easier for a caseworker to create, modify and discard evidence, and to then apply the change to additional active case members.

When the Multiple Participant Evidence Update function is enabled, a list of participants or evidence is included in the dynamic evidence create, modify, and discard pages. During intake, if the received date or the effective date is before the effective date of the dynamic evidence type effective date, the screens revert to the screens that are valid for the input received date or effective date. This is standard dynamic evidence behavior.

The multiple participant evidence update is available for dynamic evidence only. The feature is not available for static evidence. For dynamic evidence, the multiple participant evidence update is effective dated. As with all dynamic evidence updates, if the multiple participant evidence update is enabled the change to the screens is only available if the received date or effective date of the evidence is after the effective date of the dynamic evidence type effective date.

Below is an overview of how the multiple participant evidence update affects each page.

### The Create Page

When a user selects the **Add** action or the **Plus icon** from the evidence dashboard. The create page is presented to the user. If there are more than one active case participants on the case, the **Case Participant(s)** cluster displays a list of contains a list of case participants.

When selects the **Save** button, the evidence that is entered is applied to all the participants selected in the **Case Participant(s)** list.

If there is only one person on the case, the **Case Participant(s)** cluster contains a label with the selected participants name.

## The Modify Page

When a user selects the **Continue Editing** or the **Edit** action from the evidence action menu. The modify page is presented to the user. If there are more than one active case participants on the case, an extra cluster is added to the modal with a title **Apply Evidence To Other Case Participants**. The **Apply Evidence To Other Case Participants** cluster contains a multi-select list.

1. A list of Active Evidence Records of the same Evidence Type as the selected Evidence record, for all active, non-end-dated case participants. If there is an In-Edit version of the record, the In-Edit version is displayed in the list.
2. The selected record is not displayed in the list.
3. Evidence that is associated with the selected case participant is not displayed on the list.

When the caseworker selects the **Save** button, the modification entered is applied to the selected case participant and all additional case participants selected in the **Apply Evidence To Other Case Participants** list. Once the save is completed, all selected records are updated with the new information, this includes any comments that might already exist.

If there is only one person on the case, the **Apply Evidence To Other Case Participants** is not visible.

## The Discard Page

When a user selects the **Discard** action from the evidence action menu. The discard page is presented to the user. If there are more than one active case participants on the case, an additional cluster is added to the modal with a title **Apply Discard To Other Case Participants**. The **Apply Discard To Other Case Participants** cluster contains a multi-select list. The contents of the list is as follows;

1. A list of In-Edit records of the same Evidence Type as the selected Evidence record, for all active, non-end-dated case participants.
2. The selected record is not displayed in the list.
3. Additional In-Edit evidences of the same type for the selected participant is not displayed on the list.

When selects the **Yes** button, the evidence is discarded for selected case participant and all additional case participants selected in the **Apply Discard To Other Case Participants** list.

If there is only one person on the case, the **Apply Discard To Other Case Participants** is not visible.

Before applying the multiple participant evidence update to a new evidence type, the proceeding guidelines must be adhered to.

## Multiple participant evidence update guidelines

Not all dynamic evidence entities are suitable for multiple participant evidence. The guidelines for developers and business users outline when a multi-participant evidence update can be applied to dynamic evidence.

1. The multi-participant evidence update can only be applied when all the attributes of an evidence can be applied to other case participants at the same time. Where one or more attributes on an evidence cannot be applied to other participants, the evidence type is not suitable for multiple participant evidence update.

An example of this within Cúram is PDCAddress and PhoneNumber, which have been configured for multi-participant evidence updates. A household can move address on the same date, or start using a contact number on the same date.

Is there any flexibility in that statement above, could a developer apply the multiple participant evidence update on evidence where most of the attributes would apply?

There is limited flexibility here, if the evidence is categorical or classification evidence that is not used by the rules to determine eligibility then the feature could be applied. However, if all the information that is captured by a caseworker is used by rules, the caseworker would have to change the incorrect evidence attribute once it is been created. Therefore, there is no real usability gain for the user.

2. The multiple participant evidence is not supported on parent-child Evidence types.
3. The Evidence must have a Create/Modify and Discard page that applies to all participants.

The multiple participant evidence update, once enabled is applied across the create, modify, and discard pages.

4. If the Evidence create page selects a participant from the predefined set of case participants, the feature is suitable. However, if instead the create page allows for the selection of an existing participant on the case or registration of a new case participant, the feature is not suitable and cannot be used.

The setting to enable the different participant selection options is managed in the Dynamic Evidence Editor by the 'Show All Fields' check box. The ability to apply multiple evidence updates across participants and 'Show All Fields' is mutually exclusive. The reason is, the multi-select list does not get updated if a new participant is added to the case on the create page. In order to enable the multiple participant evidence update, the 'Show All Fields' check box must be disabled in the Dynamic Evidence Editor.

5. The Business of the Evidence applies to one person only.

If there is evidence that is centered around one participant, there is no business reason for the evidence to be applied across multiple participants.

6. Static Evidence has not been updated to include the multi-participant feature. If customers have a requirement for multi-participant updates on static evidence, they must implement this themselves.
7. When enabled, the multi-participant evidence update performs multiple evidence inserts, updates, or discards within a single transaction. The performance of this transaction will therefore be impacted with increasing number of records selected and users should be advised, in scenarios involving large household sizes, they may need to consider splitting the data-entry and not attempt to achieve in one go. When evaluating this feature, the following factors must be considered to determine if these negatively impact the performance leaving it unsuitable to adapt the feature for the evidence type in question;
  - a. Validations performed on the evidence type especially where validations evaluated over an extended time frame.
  - b. Verifications conditions especially if there are many conditions in a verification ruleset.
  - c. Pre and/or post insert processing.

## Notices

---

This information was developed for products and services offered in the United States.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

*IBM Director of Licensing IBM Corporation North Castle Drive, MD-NC119 Armonk, NY 10504-1785 US*

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

*Intellectual Property Licensing Legal and Intellectual Property Law IBM Japan Ltd. 19-21, Nihonbashi-Hakozakicho, Chuo-ku Tokyo 103-8510, Japan*

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM websites are provided for convenience only and do not in any manner serve as an endorsement of those websites. The materials at those websites are not part of the materials for this IBM product and use of those websites is at your own risk.

IBM may use or distribute any of the information you provide in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

*IBM Director of Licensing IBM Corporation North Castle Drive, MD-NC119 Armonk, NY 10504-1785 US*

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

The performance data and client examples cited are presented for illustrative purposes only. Actual performance results may vary depending on specific configurations and operating conditions.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

Statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

All IBM prices shown are IBM's suggested retail prices, are current and are subject to change without notice. Dealer prices may vary.

This information is for planning purposes only. The information herein is subject to change before the products described become available.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to actual people or business enterprises is entirely coincidental.

#### COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

## Privacy Policy considerations

---

IBM Software products, including software as a service solutions, ("Software Offerings") may use cookies or other technologies to collect product usage information, to help improve the end user experience, to tailor interactions with the end user or for other purposes. In many cases no personally identifiable information is collected by the Software Offerings. Some of our Software Offerings can help enable you to collect personally identifiable information. If this Software Offering uses cookies to collect personally identifiable information, specific information about this offering's use of cookies is set forth below.

Depending upon the configurations deployed, this Software Offering may use session cookies or other similar technologies that collect each user's name, user name, password, and/or other personally identifiable information for purposes of session management, authentication, enhanced user usability, single sign-on configuration and/or other usage tracking and/or functional purposes. These cookies or other similar technologies cannot be disabled.

If the configurations deployed for this Software Offering provide you as customer the ability to collect personally identifiable information from end users via cookies and other technologies, you should seek your own legal advice about any laws applicable to such data collection, including any requirements for notice and consent.

For more information about the use of various technologies, including cookies, for these purposes, see IBM's Privacy Policy at <http://www.ibm.com/privacy> and IBM's Online Privacy Statement at <http://www.ibm.com/privacy/details> the section entitled "Cookies, Web Beacons and Other Technologies" and the "IBM Software Products and Software-as-a-Service Privacy Statement" at <http://www.ibm.com/software/info/product-privacy>.

## Trademarks

---

IBM, the IBM logo, and [ibm.com](http://www.ibm.com) are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at <http://www.ibm.com/legal/copytrade.shtml>.

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

Java™ and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

The registered trademark Linux is used pursuant to a sublicense from the Linux Foundation, the exclusive licensee of Linus Torvalds, owner of the mark on a worldwide basis.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Other names may be trademarks of their respective owners. Other company, product, and service names may be trademarks or service marks of others.







Part Number:

(1P) P/N: