

# Cúram 8.2

**What's New Guide** 

# Note

Before using this information and the product it supports, read the information in <u>Notices on page</u> 23

# **Edition**

This edition applies to Cúram 8.2.

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### Chapter 1 What's new in Cúram

Read about new features and updates in Cúram.

### 1.1 What's new in Cúram 8.2.0

Read about updates and enhancements in Cúram 8.2.0 released on 3rd July 2025.

For important installation information, and to learn more about product improvements and resolved issues in 8.2.0, see also the Release Notes.

### Updates for all:

- Support for Modern Java<sup>™</sup>
- Support for Azure AKS and Amazon EKS

### Updates for caseworkers:

- Accessibility improvements
- Font size and weight enhancement for improved readability
- Rich Text editor upgrade and maintenance

### Updates for developers:

- Microsoft Windows 11 Support
- Rational® Software Architect Designer 9.7.1.2
- <u>Db2® 12.1 support</u>
- Red Hat Enterpise Linux (RHEL) Server 9
- Improvements to Cúram Swagger Specification

### Support for Modern Java™

Cúram is a Java<sup>™</sup> based application, currently built on Java 8. Oracle have announced that Java 8 is going out of support in December 2030. Of even greater urgency are the support dates announced by the Application Server vendors who produce the JEE platform software on which Cúram runs.

- Traditional WebSphere Will never support a version of Java<sup>™</sup> beyond Java 8 SE. It will however continue to support Java 8 SE until 2030.
- WebSphere® Liberty Will drop support for Java<sup>™</sup> 8 SE in October 2026.
- Oracle WebLogic Server Oracle WebLogic plans indicate that the last 2 versions to support Java<sup>™</sup> 8 SE are likely to be: version 12.2.1.4, supported until the end of 2027, and 14.1.1.0 until mid/end 2026.

To address this, Cúram version 8.2 now supports Java 21 for deployment on WebSphere® Liberty in containers\*. It is expected that it will take some time for customers to move to Modern Java, and both code and Open Source libraries differ between the Java 8 and Java 21 platforms. For this reason, separate installs of Cúram are provided for Java 8 and Modern Java.

We have ensured that the base Cúram platform has been updated such that all code and open source present is fully compatible with Java 21, and for many customers this will mean the effort of migrating to Modern Java will be largely trivial. For those with significant customization code and/or use of additional open source libraries, some analysis and refactoring may however be required.

In order to help ease the process of migration, we have published the following guides:

- Migrating to Modern Java Whitepaper
- Modern Java Migration Guide

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### Support for Azure AKS and Amazon EKS

In addition to existing support for deployments on Red Hat® OpenShift®, Cúram 8.2 extends its containerization capabilities to other Kubernetes cloud platform services. Support for Azure Kubernetes Service (AKS) has been expanded to include production environments, while Amazon Elastic Kubernetes Service (EKS) is now supported for development and test environments. This broader support offers customers greater flexibility and choice in modernizing their deployment strategies with container-based infrastructure. For detailed installation guidance and platform requirements, see the Cúram on Kubernetes Runbook.

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### **Accessibility Improvements**

This release includes a number of accessibility improvements implemented throughout the Cúram application. Our ongoing focus on the Web Content Accessibility Guidelines (WCAG) demonstrates our commitment to making Cúram web content more accessible.

34 changes were made across the following WCAG checkpoints:

- 1.3.1 Info and Relationships
- **1.4.3** Contrast (Minimum)
- **2.1.1** Keyboard
- **2.4.6** Headings and Labels
- **2.4.7** Focus Visible
- 3.2.1 On Focus (Predictability)
- 3.2.2 On Input (Understandability)
- 4.1.1 Parsing (Robustness)
- **4.1.2** Name, Role, Value

For more information about these accessibility improvements, see the *Accessibility* section in the Release Notes.

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<sup>\*</sup>Other deployment configurations may be added pending a review of customer plans and requirements.

### Font size and weight enhancement for improved readability

We have made subtle yet impactful updates to the font sizes and weights throughout the application to enhance overall readability and user experience.

- Increased font size for read-only and input labels.
- Set letter spacing to improve text clarity.
- Increased the weight of category headers in the Shortcuts panel for clearer section separation.

These changes aim to improve legibility while minimizing the risk of text wrapping or truncation.

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### Rich Text editor upgrade and maintenance

The Cúram rich text editor has received a significant upgrade in version 8.2. The underlying technology, CKEditor, has been updated to enhance stability, security, and performance. This upgrade ensures a smoother and more secure editing experience for all users.

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### Microsoft<sup>™</sup> Windows<sup>™</sup> 11 Support

Support for the Microsoft<sup>™</sup> Windows<sup>™</sup> 11 platform for the designing, developing, testing, and building of the Cúram application has been added.

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### Rational® Software Architect Designer 9.7.1.2

The supported modeling environment for the Cúram product, Rational<sup>®</sup> Software Architect Designer (RSAD) has been upgraded to version 9.7.1.2, which includes support for the Microsoft<sup>™</sup> Windows<sup>™</sup> 11 platform .

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### Db2® 12.1 support

Support for IBM® Db2® 12.1 has been added. For more information, refer to the database prerequisites associated with this product version.

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### Red Hat® Enterprise Linux® (RHEL) Server 9

Support is now added for Red Hat<sup>®</sup> Enterprise Linux<sup>®</sup> (RHEL) Server 9. This platform can be used for both the building and deployment of the Cúram application.

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### Improvements to Cúram Swagger Specification

Version 8.2 introduces Swagger infrastructure updates to enhance REST architecture, improving customer REST request handling. The improved REST architecture allows for more comprehensive and clearer API documentation and error messaging, making it easier for

developers to understand and use the API. These enhancements will ultimately improve the efficiency of developers and customers' working with REST.

For more detail see Rest external Release Notes.

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### 1.2 What's new in Cúram 8.1.3

Read about updates and enhancements in Cúram 8.1.3, released on 28 November 2024.

For important installation information, and to learn more about product improvements and resolved issues in 8.1.3, see also the <u>Release Notes</u>.

Updates for all:

Accessibility improvements

Updates for citizens:

Accessible server-side validations for IEG forms

Updates for caseworkers:

• New column 'Worked on By' added to the Task List page

Updates for developers:

- Flex Editor Server Code Integration
- Batch Framework Optimizations
- Batch Reporting
- Performance improvement reassessing cases with list objectives
- Authentication
- Support of IBM® Db2® Community Edition

#### **Accessibility improvements**

In this release, several accessibility improvements have been made, which are reflected throughout the Cúram application. Our ongoing focus on the Web Content Accessibility Guidelines (WCAG) demonstrates our commitment to making Cúram web content more accessible.

49 changes have been made across the following WCAG checkpoints:

- 1.3.1 Info and Relationships
- 1.4.3 Distinguishable Contrast (Minimum)
- 1.4.4 Distinguishable Resize Text
- 1.4.10 Distinguishable Reflow, Text Spacing
- 1.4.11 Distinguishable Non-Text Contrast
- 2.1.1 Keyboard
- 2.4.3 Focus Order
- 2.4.4 Link Purpose (In Context)
- 2.4.6 Headings and Labels

- 2.4.7 Focus Visible
- 3.2.1 Predictable On Focus
- 4.1.2 Name, Role, Value

For more information about these accessibility improvements, see the *Accessibility* section in the Release Notes.

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### New column 'Worked on By' added to the Task List page

The tasks list page has been updated to include a new column, 'Worked on By'. This column indicates whether the task is reserved or not. When the task is reserved, the column displays the full name of the user who is working on the task. The name is a hyperlink, which, when selected, displays additional information about the user.

**Note**: The column that previously displayed the orange icon has been removed.

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### Accessible server-side validations for Intelligent Evidence Gathering (IEG) forms

In Cúram Citizen Engagement (CE), there are two distinct phases of validations when completing an online form (using IEG). On 'continue or submit', client-side error messages are displayed first and once they are all corrected, server-side error messages are then displayed. Fields requiring server-side validation do not have any inline error messages. When the server-side validation occurs, the error message is listed at the top of the page but there is no link to the field where the error occurred, the field with the error is not highlighted and the error is not displayed inline. Examples of server-side error messages are where a person's date of birth can't be in the future, or where an SSN/SIN needs to be in a certain format and have a specific number of characters

In this release, a new webApp setting

REACT\_APP\_ACCESSIBLE\_SERVER\_SIDE\_VALIDATIONS\_ENABLED is available which when set to true displays all error messages at the same time whether they are as a result of client-side or server-side validations. All error messages including server-side error messages are now accessible with a link to the field where the error occurred. The field with the error is highlighted to the user and the error message is repeated inline. The setting is contained within the file .../ packages/universal-access-sample-app/.env (which contains all webApp settings).

This setting is false by default. To avail of accessible server-side validations it must be set to true. When set to false, error messages resulting from a server-side validation will be displayed once all client-side errors have been corrected. The error message will be displayed at the top of the page only with no link to the field where the error occurred.

**Note**: To enable accessible server-side validations CE version 7.4.0 or later is required.

For more information, see the chapter *IEG* in the Universal Access Web Application in the Cúram Universal Access Responsive Web Application guide.

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### Flex Editor Server Code Integration

Prior to version 8.1.3, the Editor Applications asset consisted of two parts - server-side (.jar) and client side (.msi). When the asset was installed on top of Cúram, the server-side code of the asset would override the existing Cúram installation code. Any changes to the Cúram code would also impact the server-side code of the asset, requiring updates to the asset in order to release a new version.

Along with 8.1.3, a new version 2.0 of the Editor Applications has been introduced. In this version, the server-side code of the Editor Applications asset has been integrated into the Cúram codebase. As a result, only the client-side code remains part of the asset, thereby reducing the overhead associated with maintaining the server side code in both Cúram and the Editor Applications asset. Now, a single version of the new asset can be applied across multiple versions of Cúram releases in the future.

For more information, see the *Development Environment Installation Guide* and the *Cúram Upgrade Guide*.

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#### **Batch Framework Optimizations**

The following optimizations were identified and delivered in 8.1.3:

- New properties that allow the clearing of cache(s) during chunked batch program execution which will decrease memory usage, especially for batches that execute reassessments, such as Creole Bulk Reassessment and the Dependency Manager batch suite.
- An optimization to reduce the frequency of reads per case of the Case Nominee Product Delivery Pattern table, resulting in a reduced database load.
- Optimization of the number of transactions used for inserting batch chunk records (at the start
  of batch run) and removing them (at the end of a run) to assist with scaling batch to larger
  volumes.
- Addition of fields to the BatchProcessChunk table to capture performance statistics during execution, to help monitor and troubleshoot overall progress.

For more detail see Cúram Batch Performance Mechanisms guide.

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### **Batch Reporting**

There are new statistics captured in a report generated from the existing batch infrastructure. This allows for more effective analysis and monitoring of batch performance.

For more detail see Cúram Batch Performance Mechanisms guide.

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### Performance improvement reassessing cases with list objectives

In cases with a configuration that involves many list objectives, the repetitive nature of the SQL used to set the 'last paid to date' on already paid objectives resulted in inefficient reassessment processing. To address this, the processing to set the 'last paid to date' has been optimized so

that the SQL is executed only once, significantly improving the performance of reassessing such cases. This change will be most obvious in batch processes like ReassessOutstandingCases when they are used to reassess such cases.

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#### **Authentication**

OpenID Connect (OIDC) is the latest protocol, offering a lightweight authentication implementation that supports REST Infrastructure. Customers may want to use Security Assertion Markup Language (SAML) or OIDC in Cúram to align with their enterprise-wide authentication strategy.

Improvements in this release include:

- Expanded support for OIDC/open authorization (OAuth) 2.0 to include Liberty on Kubernetes.
- Adding a new user to the security configuration no longer needs a server restart.

For more information, see the Security Handbook.

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### Support of IBM® Db2® Community Edition

The 8.1.3 release has added support for IBM® Db2® Community Edition (CE) 11.5.x for development and testing to the Cúram prerequisites. Db2® CE includes all of the features of Db2® for non-production environments. Please see the <u>IBM site</u> for terms of use.

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### 1.3 What's new in Cúram 8.1.2

Read about updates and enhancements in Cúram 8.1.2, released on 25 April 2024.

For important installation information, and to learn more about product improvements and resolved issues in 8.1.2, see also the Release Notes.

Updates for all:

- <u>Updated documentation covering Cúram web page navigation scenarios with CSRF protection</u>
  Updates for caseworkers:
- Enhanced text translation support for product delivery display rules and eligibility viewer data

  Updates for developers:
- Enhanced framework for building external applications
- IEG Script Guidance
- Introducing new financial hook point for financial component offsets
- Updated documentation covering the application resource

# Updated documentation covering Cúram web page navigation scenarios with CSRF protection

Documentation has been added to the *Security Handbook* covering web page navigation scenarios in the Cúram application with CSRF protection.

For more information, see the Security Handbook.

# Enhanced text translation support for product delivery display rules and eligibility viewer data

Product delivery display rules and eligibility viewer are two mechanisms in Cúram for presenting eligibility and entitlement results to caseworkers. In this release, when caseworkers use the language toggle to change their application language, it will also change the language of the eligibility and entitlement results to be that of the application. This means that caseworkers can now view eligibility and entitlement results in the language of a citizen they are working with.

To enable this capability, system administrators must configure the localizable display rules application property to specify whether the translatable types of information can be translated in different locales when retrieved for use.

For more information, see the System Administration Guide, Cúram Express Rules Reference Manual and the Inside Eligibility and Entitlement Using Cúram Express Rules Guide.

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### Enhanced framework for building external applications

The Cúram Web Design System is a framework for building external web applications. It uses modern technologies, such as React JavaScript, and comes with a Design System tailor-made for providing an accessible user experience that works in browsers on desktop, tablet, and mobile devices. The Cúram Universal Access Web Application provided as part of Cúram Citzen Engagement (CE) is an example of a web application built using the design system. It is a ready-to-deploy reference application enabling agencies to offer a web self-service solution to their citizens to apply for benefits and track & manage their interactions with the agency.

In this release, the design system supports authentication of external users of any type, not just citizens seeking benefit. For example, an external user might be a child welfare mandated reporter or an authorized representative from a community-based organisation who is tasked with helping citizens apply for benefits. As the design system comes with significant support for calling Cúram Web APIs, this means you can quickly build solutions for any users that depend on data and business operations in the Cúram application. The Web Design System also supports theming of applications to match existing agency themes or to build applications with distinct themes if required.

Also in this release, the CE infrastructure has been extended to support users who act on behalf of a citizen, such as an authorized representative. Key authorized representative business processes are provided along with a sample authorized representative application which allows agencies to build out their custom application for these specific types of users allowing them to track and manage their client's interactions with the agency.

For more information on building external applications, see *Creating external applications with the Cúram Web Design System* guide.

### **IEG Script Guidance**

Intelligent Evidence Gathering (IEG) is a rapid development tool for building and publishing forms online. While IEG provides a powerful set of scripting constructs to enable form building, it can sometimes take time to translate complex customer requirements into appropriate IEG solutions. This release provides best-practice guidelines to build the best User Experience with IEG forms. User experience recommendations for form flow/structure, content, input types, errors, and validations are provided.

Sample user flows for applying for benefits, renewing benefits, or reporting a change of circumstance provide script designers (developers, designers, and business analysts) with best practices when structuring scripts. Sample script patterns provide reference solutions for solving common design problems, such as collecting address information or household relationships. There is also information on how datastore parameters and IEG elements are rendered as Design System UI components.

This information is located in the Design System asset folder for the release.

### Introducing new financial hook point for financial component offset

A new financial hook point is now available in the payments generation process so that developers can compliantly customize the logic for determining when payments are due, thus meeting specific agency requirements.

For more information, see the Financials Guide.

### Updated documentation covering the application resource

Documentation has been added to the *Cúram Server Developers Guide* covering the application resource (AppResource), what it's used for, and how the fallback mechanism for properties stored in the AppResource works.

For more information, see the Cúram Server Developers Guide.

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### 1.4 What's new in Cúram 8.1.1

Read about updates and enhancements in Cúram 8.1.1, released on 8 December 2023.

For important installation information, and to learn more about product improvements and resolved issues in 8.1.1, see also the Release Notes.

Updates for all:

- Merative TM Social Program Management is now Cúram by Merative TM
- Accessibility improvements

Updates for caseworkers:

- Improved user experience for dropdown menus
- Introducing Person Evidence Management

Updates for administrators:

• New JMX application properties

Updates for developers:

- Pre-authorization sharing
- Open-source software updates

### Merative ™ Social Program Management is now Cúram by Merative ™

We are pleased to announce our new product name Cúram by Merative <sup>TM</sup>. You can see the new product name and logo across the following locations in the 8.1.1 release:

- Application login and logout screens
- Application banners

Further updates will be made in upcoming releases as we roll out our new product name. No action is needed from you for the rebranding changes in this release.

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### **Accessibility improvements**

In this release, we have made a number of accessibility improvements, which are reflected throughout the Cúram application. Our continued focus on the Web Content Accessibility Guidelines (WCAG) indicate a commitment to making Cúram web content more accessible.

23 changes have been made across the following WCAG checkpoints:

- 1.3.1 Info and Relationships
- 1.3.5 Identify Input Purpose
- 1.4.12 Text Spacing
- 2.1.1 Keyboard
- 2.4.2 Page Titles
- 2.4.6 Headings and Labels
- 4.1.2 Name, Role, Value
- 3.2.2 On Input page shouldn't change
- 4.1.1 Avoid Validation and Parsing errors

For more information about these accessibility improvements, see the *Accessibility* section in the Release Notes.

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### Improved user experience for dropdown menus

Caseworkers can now select dropdown menu options with less clicks and improved sorting and filtering. This makes data entry less time consuming and is more intuitive for the caseworker.

When selecting from a dropdown menu, the list of options are filtered as caseworkers type into the field, making it easier to find the required option.

The dropdown now prioritizes and displays results as indicated in the following list:

- Options that start with the characters that are entered are listed, for example, entering 'i' displays Iceland.
- For options that contain more than one word, words that start with the entered characters are then listed, for example, entering 'i' displays Cayman Island.
- Options that contain the entered characters are then listed, for example, entering 'i' displays Albania.

Matching characters are highlighted so that caseworkers can see why an option was included.

The enhanced sorting and filtering behavior can be disabled by using the system application property 'Text filter and sort options for IEG dropdowns and codetable hierarchy dropdowns'.

For more information about dropdowns, see the *Web Client Reference Manual*. For more information about IEG, see the *Working with Intelligent Evidence Gathering (IEG) Guide*.

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### **Introducing Person Evidence Management**

Person Evidence Management provides a new approach to managing person evidence. Caseworkers can now use Person Evidence Management to maintain evidence centrally at the person level. A complete lifecycle of evidence management is provided at the person level, allowing caseworkers to interact with person evidence by using an evidence workspace. This workspace provides an evidence dashboard and active and in-edit evidence lists.

The evidence that is associated with a person is not linked to a specific case. This independence allows caseworkers to access the latest version of evidence and verification statuses without needing to navigate across multiple integrated cases. Efficiency is enhanced by providing caseworkers with a dedicated space to manage evidence that is related to individuals, therefore improving accessibility and ensuring that the most up-to-date information is available without caseworkers being constrained by case-specific access permissions.

Please see the ReadMe file with this release as the feature is separately licensed. The ReadMe is available from the Curam8110 installer directory in the README subdirectory.

For more information about Person Evidence Management and how to enable it, see the *Person Evidence Management* guide.

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### New JMX application properties

Cúram has introduced the following two new properties that enable accurate JMX statistics to be captured for batch programs:

- Enable JMX Statistics Report Per Batch
- Statistics Output Timer Period For Batch Programs Timer Period

By enabling the application property Enable JMX Statistics Report Per Batch, a JMX report is generated at the end of each batch program. By setting the application property Statistics Output Timer Period For Batch Programs - Timer Period, a different JMX timer period can be specified for batch programs only. All JMX reports now include total and free memory information in the *OperationalStats* section.

For more information, see the *Cúram JMX Configuration Guide* and the *Batch Processes Developer Guide*.

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### Pre-authorization sharing

Pre-authorization sharing is designed to facilitate the sharing of evidence within an application before authorization. This feature is particularly valuable in scenarios where applications might experience delays while waiting for all outstanding verifications to be completed before authorization. Allowing the sharing of evidence prior to authorization enables timely access to verified data especially when it relates to an individual's updated circumstances which can be important for the agency's operations elsewhere in the system.

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### **Open-source software updates**

In this release, we completed the centralization of our open-source software to help streamline development workflows. Included in this effort was the updating of over 40 open-source software libraries in the Cúram application. These libraries included multiple updates to Lucene, Jackson, and GraphQL.

By regularly updating Cúram's open-source software (OSS), the system stays current with the latest features, patches, and security updates. This not only enhances the overall performance and security of the system, but also makes it easier to incorporate and adapt to changes in the future.

In the *Third Party Updates* section of the Release Notes, Cúram provides detailed information about changes, improvements, and updates to various open-source libraries that are integrated into the Cúram open-source software ecosystem. For a full list of these changes, see the *Third Party Updates* section in the Release Notes.

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# **Chapter 2 Release notes**

Detailed release notes describe what is new and changed for each release. The defects that are fixed in each release are listed.

Review the release notes for your version before installation or deployment, and before you start to configure or customize Cúram applications, see the <u>Merative Support Docs site</u>.

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