



eRAD RIS

RELEASE ANNOUNCEMENT

Build 4.2023.080

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PUBLICATION HISTORY

Revision	Author	Description
October 11, 2023	Kevin Brooks / Hilary Saltmarsh	<ul style="list-style-type: none"> ▪ Commercial release.

SUMMARY

Release Announcement

This release of *ERAD RIS 4.2023.080* extends the functionality of the Backend Automation Tool (BAT) to create Backend Automation Task (BAT) "scripts" to implement advanced RIS workflows without requiring source code changes.

These workflows can be initiated by any number of events that occur in RIS, and can complete multiple actions without any user intervention either immediately or as a series of scheduled actions.

This release also delivers a BAT script to implement a configurable delay between the signing of a report in RIS and the forwarding of a C-CDA to FHIR systems to which the patients has enrolled (such as Darena's BlueButtonPRO).



Additional technical details and deploy instructions are available in the *SERVICE TEAM EDITION* of this document.

New Features

This release introduces the following features and enhancements:

Category	Redmine #	Subject	Description
BAT	31787	Backend Automation Tool (BAT) Phase Two - Rules	This enhancement to BAT extends the functionality of the Backend Automation Tool (BAT) to allow customers to create Backend Automation Task (BAT) "scripts" to implement advanced RIS workflows without requiring source code changes.
BAT	32920	BAT Rule Editor for the BATCollection RIS lookup table	This enhancement to BAT introduces an enhanced editor for the BATCollection RIS lookup table for editing Inclusion Rules and Actions. The editor adds functionality to select the rule type (currently limited to SQL), select a rule template, edit rule text, and insert predefined parameters into the rule.
CEHRT	34399	Configurable delay before forwarding reports to Darena's BlueButtonPRO	This enhancement to CEHRT introduces a configurable delay between the signing of a report in RIS and the forwarding of a C-CDA to FHIR systems to which the patients has enrolled (such as Darena's BlueButtonPRO). This delay is required to comply with California legislation.

SORTED BY CATEGORY AND REDMINE

Refer to the **FEATURE DETAILS** section below for configuration and usage information.

New Known Limitations

The following new Known Limitations were identified with this release:

- **KNOWN LIMITATION (FROM #31787)** - COLUMN WIDTH DISPLAY ISSUE WITH BATCOLLECTION LOOKUP
- **EXPECTED BEHAVIOR BY DESIGN (FROM #32920)** - THE LIST OF TEMPLATES CANNOT BE CUSTOMIZED

Refer to the **FEATURE DETAILS** section below for more information.



Carefully review all Known Limitations identified here and in the release notes of all other versions being applied and communicate relevant items to all those affected.

FEATURE DETAILS

BAT

Feature #31787 - Backend Automation Tool (BAT) Phase Two - Rules

Summary

This enhancement to BAT extends the functionality of the Backend Automation Tool (BAT) to allow customers to implement Backend Automation Task (BAT) "scripts" to implement advanced RIS workflows without requiring source code changes.

Background

Previously, FEATURE #31786: BACKEND AUTOMATION TOOL (BAT) PHASE ONE introduced the concept of automation rules and the BATCollection RIS lookup table editor.

This initial phase of BAT functionality delivered the functionality necessary to support FEATURE #3168 - ELECTRONIC LAY LETTER DISTRIBUTION, which allowed sending a Lay Letter via Print+Mail to a patient who did not access their electronic version of the letter. For additional background on this feature, review the ERAD RIS SERVICE RELEASE NOTES 3.2022.6.20 document.

Additionally, FEATURE #32920 - ENHANCED BATCOLLECTION RIS LOOKUP TABLE EDITOR included in this release introduces an enhanced editor for the BATCollection RIS lookup table to improve the user experience when creating Backend Automation Task scripts.

The related FEATURE #34399 - CONFIGURABLE DELAY BEFORE FORWARDING REPORTS TO DARENA'S BLUEBUTTONPRO, also included in this release, serves as excellent example of a simple Backend Automation Task, and its implementation should be reviewed as a training exercise.

Intended Audience

The Backend Automation Tool is an extremely powerful and flexible utility. However, because these automation scripts are capable of directly reading and writing data to the database, implementing any script requires extreme caution and exhaustive testing.

Scripts should not be created or altered without explicit involvement and review by the:

- Workflow owner, in consultation with the responsible business unit.
- System Administrator.
- Service Team, in consultation with the Development Team.



WARNING: *BAT scripts should never be deployed into a production system without extensive review and testing.*

Potential consequences of improper scripting can include:

- Data loss
- Data corruption
- Degradation of system performance, including rendering the system non-responsive.

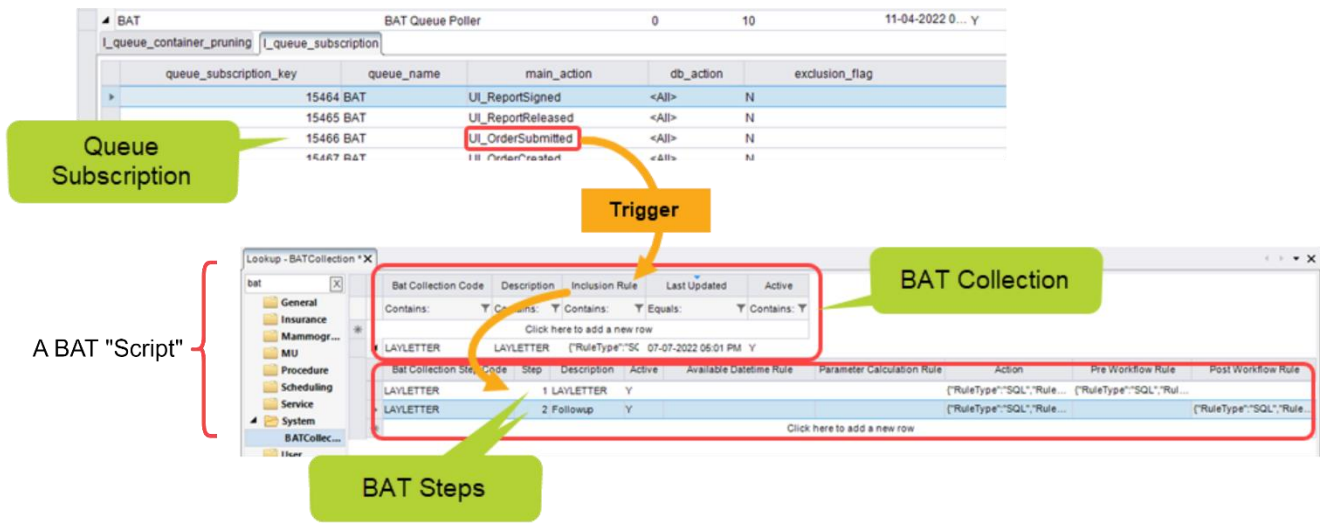
Feature Description

With this change, users can create custom SQL-based workflows as Backend Automation Task (BAT) scripts via the [BATCollection](#) RIS lookup table to implement advanced RIS workflows without requiring source code changes.

These workflows can be initiated by any number of events that occur in RIS, and can complete multiple actions without any user intervention either immediately or as a series of scheduled actions.

General Design

The Backend Automation Tool processes the workflow steps defined in the `BATCollection` RIS lookup table when triggered a RIS action identified in the `QueueSubscription` RIS lookup table.



A BAT "SCRIPT" IS A SERIES OF STEPS INITIATED BY A RIS ACTION.

Each of these workflows (can be thought of as a script) is composed of three elements:

1. **Queue Subscription** - One or more RIS actions that will initiate processing of the BAT Collection.
2. **BAT Collection** - A workflow.
3. **BAT Steps** - A series of rules and actions to complete or continue the workflow.



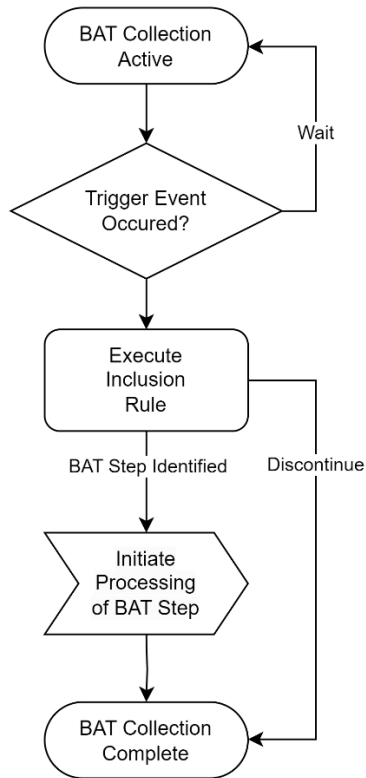
Currently all tasks are scripted in SQL, although future functionality may introduce support for alternative scripting, such as C# or JavaScript.

Queue Subscription

The **Queue Subscription** defines all the RIS actions (events) that can "trigger" the initial execution of BAT Collections (scripts).

BAT Collection

Once a **BAT Collection** is triggered, its **Inclusion Rule** is evaluated to determine if all conditions are met to enter the workflow, and the initial BAT Step action is determined. It is important that the rule confirms that the triggering RIS action is correct.



OVERVIEW OF THE BAT COLLECTION WORKFLOW.

BAT Steps

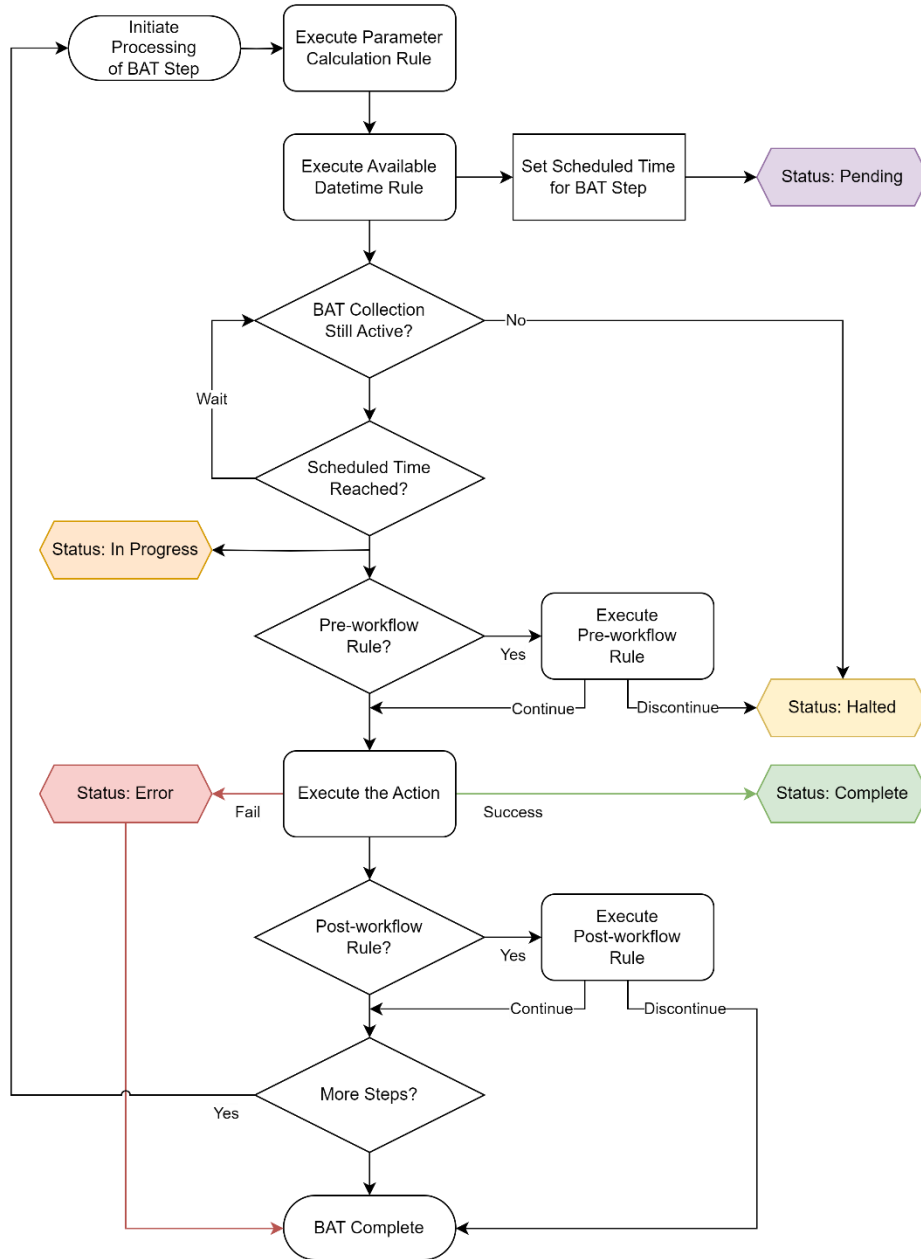
Each step begins by determining the scheduled time for the step's main logic to begin by processing the step's:

- **Parameter Calculation Rule** - Optional logic initialize any @parameters (e.g. @patient_key) which may then be referenced by subsequent steps. Note that once initialized, these read-only values persist for the life of the BAT Collection.
- **Available Datetime Rule** - Logic to define a scheduled time for the step to begin processing (it may be immediate).

Processing then waits until this time is reached and performs the step's:

- **Pre Workflow Rule** - Optional logic that is executed prior to processing the action to determine if the Action should still be executed or if the workflow is aborted.
- **Action** - The logic to be executed, after which the step's status is considered Complete.
- **Post Workflow Rule** - Optional logic that is executed after the action has completed to determine the next step in the workflow. Note that this facilitates logic flow; for example, step 3 may identify step 1 as the next step. If blank, then the next step in the sequence is used.

Processing continues by initializing the scheduled time for the next step, and continues as long as a next BAT Step is identified (or an error occurs).



OVERVIEW OF THE BAT STEPS WORKFLOW.

Operation

Creating a Queue Subscription

The **Queue Subscription** defines all the RIS actions (events) that can "trigger" the initial execution of BAT Collections (scripts).

Queue Subscriptions are created in the `QueueSubscription` Lookup Table, as child entries of the `BAT` Queue Name (which is named to match the value given to the `BATQueueName` service-level setting).

queue_subscription_key	queue_name	main_action	db_action	exclusion_flag
15464 BAT	BAT	UI_ReportSigned	<All>	N
15465 BAT	BAT	UI_ReportReleased	<All>	N
15466 BAT	BAT	UI_OrderSubmitted	<All>	N
15467 BAT	BAT	UI_OrderCreated	<All>	N
15468 BAT	BAT	UI_OrderUpdated	<All>	N
15469 BAT	BAT	UI_StudyScheduled	<All>	N
15470 BAT	BAT	UI_StudyUpdated	<All>	N



Note that several different BAT Collection workflows may be initiated by the same subscribed action. For example, when a Report is Signed, it may initiate custom faxing, billing, and customer contact workflows.

When adding subscriptions from the `l_queue_subscription` tab for `BAT`:

- `queue_name` - Always use `BAT`.
- `main_action` - Use `<All>` if necessary, but be as specific as possible.
- `db_action` - Use `<All>` if necessary, but be as specific as possible.
- `exclusion_flag` - Use `N`.

As a performance consideration, note that all `main_action` and `db_action` items listed under this queue subscription will be picked up by the BAT service, but beware that some main actions fire much more frequently than others (e.g. `UI_StudyUpdated`)

Be as concise as possible when specifying which actions kick off the BAT workflow. Either specify a `db_action` for the corresponding `main_action`, or join the `c_action` table into your inclusion rule and check the main/db_actions manually in your query (e.g. `where db_action not in ('...', ...)`).

Creating a BAT Collection

A separate **BAT Collection** is defined for each workflow. The BAT Collection includes the rules necessary to enter the workflow.

Bat Collection Code	Description	Inclusion Rule	Last Updated	Active
Contains:	Contains:	contains:	Equals:	Contains:
BATCollectionExample	BAT Collection Example	"RuleType": "SQL", "Rule..."	Y	

Bat Collection Code	Step	Description	Active	Available Datetime Rule	Parameter Calculation Rule	Action	Pre Workflow Rule	Post Workflow Rule

When any subscribed RIS event occurs, it triggers each BAT Collection's `Inclusion Rule` to be evaluated to determine if all conditions are met to begin the workflow. The rule would typically include logic to:

- Confirm the Queue Subscription action that triggered the rule is relevant for the workflow.
- Evaluate any other business rules to determine if the workflow should begin.
- Determine which `Step` (integer) the workflow should begin with.



Note that a BAT Collection workflow may be initiated by several different subscribed actions. For example, the same custom faxing workflow may be triggered when an Order is Submitted or when a Study is Scheduled.

If the rule returns a valid `Step` integer, it triggers the workflow to begin with that step.

When adding a BAT Collection:

- `Bat Collection Code` - Uniquely identifies the BAT Collection that will complete the task.
- `Description` - In addition to identifying the purpose of the rule, it is recommended to identify the owner/manager of the rule and reference any external documentation.

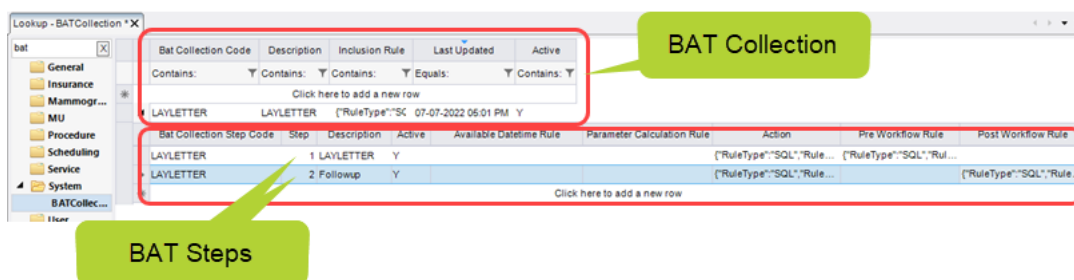
- **Inclusion Rule** - SQL that determines if the BAT Collection should be executed (by returning the initial BAT Step to be executed as a positive integer), or not (by returning a negative integer).
- **Active** - When **N**, both the collection and all BAT Steps currently in process are disabled.



Refer to the related **FEATURE #32920 - ENHANCED BATCOLLECTION RIS LOOKUP TABLE EDITOR** included in this release when editing an **Inclusion Rule**.

Creating BAT Steps

Each **BAT Collection** includes one or more **BAT Steps**. Each BAT Step includes the rules and actions necessary to complete or continue the workflow.



BAT Steps do not need to run sequentially. Each step can include validations to determine if the task should execute or abort, branch and loop, and potentially even create additional follow-up tasks.

The BAT Steps rules and actions are scripted in SQL. The SQL code not only drives the logic of the script itself, but can also perform database-level actions. Scripts have full access to run any TSQL statements, stored procedures, scalar functions, and can select/update/delete data directly from the database.



WARNING: *There is no automatic validation of SQL logic or syntax.*

This makes the BAT framework an *extremely* powerful tool that allows the Service Team to implement and modify custom RIS functionality without modifications to the RIS source code.



WARNING: *BAT scripts should never be deployed into a production system without extensive review and testing.*

Potential consequences of improper scripting can include:

- Data loss
- Data corruption
- Degradation of system performance, including rendering the system non-responsive.

Each BAT Step first evaluates its **Available Datetime Rule** to calculate when its Action should occur, performs that **Action**, and then evaluates its **Post Workflow Rule** to determine what the next step in the workflow should be.

Additionally, the BAT Step may evaluate a **Parameter Calculation Rule** to cache or pre-calculate values to be referenced later, and a **Pre Workflow Rule** with additional logic.

When adding BAT Steps:

- **Bat Collection Code** - Ties the BAT Step to the BAT Collection.
- **Step** - Uniquely identifies the BAT Step. Note that step numbers do not necessarily determine execution sequence.
- **Description** - Documents the step's logic.
- **Active** - When **N**, the step is disabled.

- **Available Datetime Rule** - Identifies the time the step is scheduled for execution. If not specified, the Action will execute immediately.
- **Parameter Calculation Rule** - Optional SQL code to cache or pre-calculate any @parameters (e.g. @patient_key) to be referenced by the step's Action or rules (including **Available Datetime Rule**). Note that these values are calculated when the BAT Step is initialized, rather than at the time the Action is executed (as determined by the **Available Datetime Rule**).
- **Action** - The SQL code to be executed at the pre-determined datetime.
- **Pre Workflow Rule** - Optional SQL code executed prior to processing the action. Typically, the rule determines if conditions are still appropriate and the Action should be executed (by returning a positive integer), or if the workflow should be aborted (e.g., the patient has cancelled their exam), skipping the Post Workflow Rule and all subsequent BAT Steps (by returning a negative integer).
- **Post Workflow Rule** - Optional SQL code executed after the Action has completed that typically includes identifying the next step to be executed (by returning the next Step as a positive integer) or discontinuing the script (by returning a negative integer).

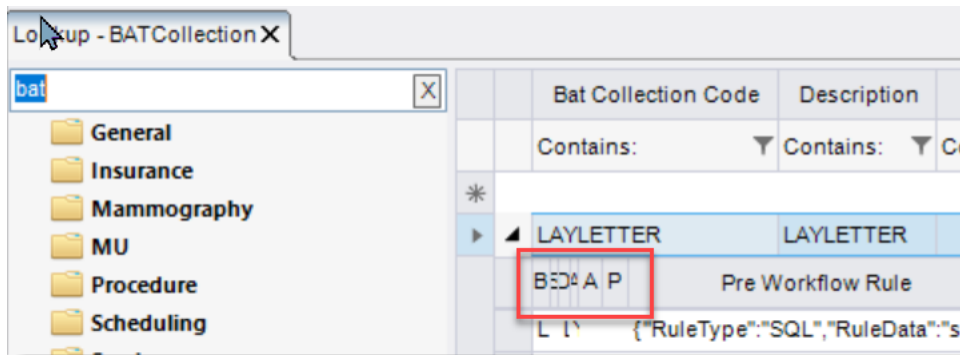


Refer to the related **FEATURE #32920 - ENHANCED BATCOLLECTION RIS LOOKUP TABLE EDITOR** included in this release when editing an **Inclusion Rule** or **Action**.

Known Limitations

The following new Known Limitations have been identified and should be communicated to affected users:

- **KNOWN LIMITATION (FROM #31787) - COLUMN WIDTH DISPLAY ISSUE WITH BATCOLLECTION LOOKUP**
 - **Issue:** Each time the **BATCollection** lookup is opened, column widths revert to a very narrow setting.



- **Impact:** Display issue.
- **Workaround:** Manually resize columns.

Service Team Upgrade Instructions



Additional technical details and deploy instructions are available in the **SERVICE TEAM EDITION** of this document.

Configuration Instructions

System Administrators must complete the following actions to enable this feature and Service Team assistance is required for some actions:



Additional technical details and deploy instructions are available in the **SERVICE TEAM EDITION** of this document.

RIS Client

Changes to **QueueSubscription** Lookup Table Settings

Create a queue subscription to define the specific RIS action(s) that will initiate the workflow:

1. Confirm the following row exists in the `QueueSubscription` RIS Lookup Table, or add it if not:
 - 1.1. `Queue Name` = `BAT`
 - 1.2. `Description` = `Actions that will initiate BAT Collection workflows.`
 - 1.3. `Queue Rows to Acquire` = `10`

Changes to `BATCollection` Lookup Table Settings



WARNING: Do not deploy or modify BAT scripts without consulting the Service Team.

Feature #32920 - BAT Rule Editor for the `BATCollection` RIS lookup table

Summary

This enhancement to BAT introduces an enhanced editor for the `BATCollection` RIS lookup table for editing Inclusion Rules and Actions. The editor adds functionality to select the rule type (currently limited to SQL), select a rule template, edit rule text, and insert predefined parameters into the rule.

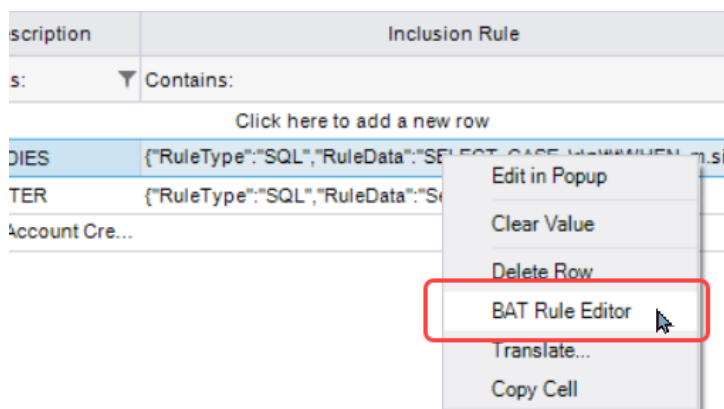
Background

Previously, [FEATURE #31786: BACKEND AUTOMATION TOOL \(BAT\) PHASE ONE](#) introduced the concept of automation rules and the `BATCollection` RIS lookup table. However, this feature did not supply an editor for rules.

With the introduction of [FEATURE # 31787 - BACKEND AUTOMATION TOOL \(BAT\) PHASE TWO - RULES](#), the ability to more easily create and edit advanced rules was desired.

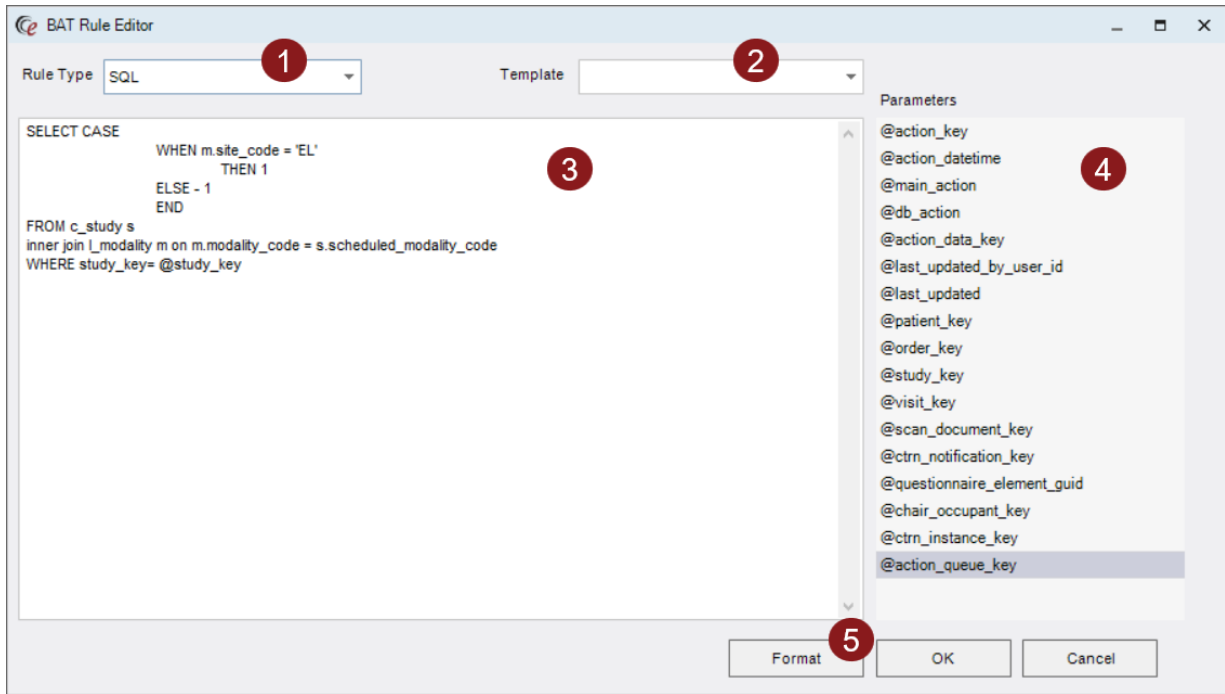
Feature Description

The enhanced editor for the `BATCollection` RIS lookup table can be accessed by right-clicking an `Inclusion Rule`, `Parameter Calculation Rule`, `Available Datetime Rule`, `Pre Workflow Rule`, `Action`, or `Post Workflow Rule`:



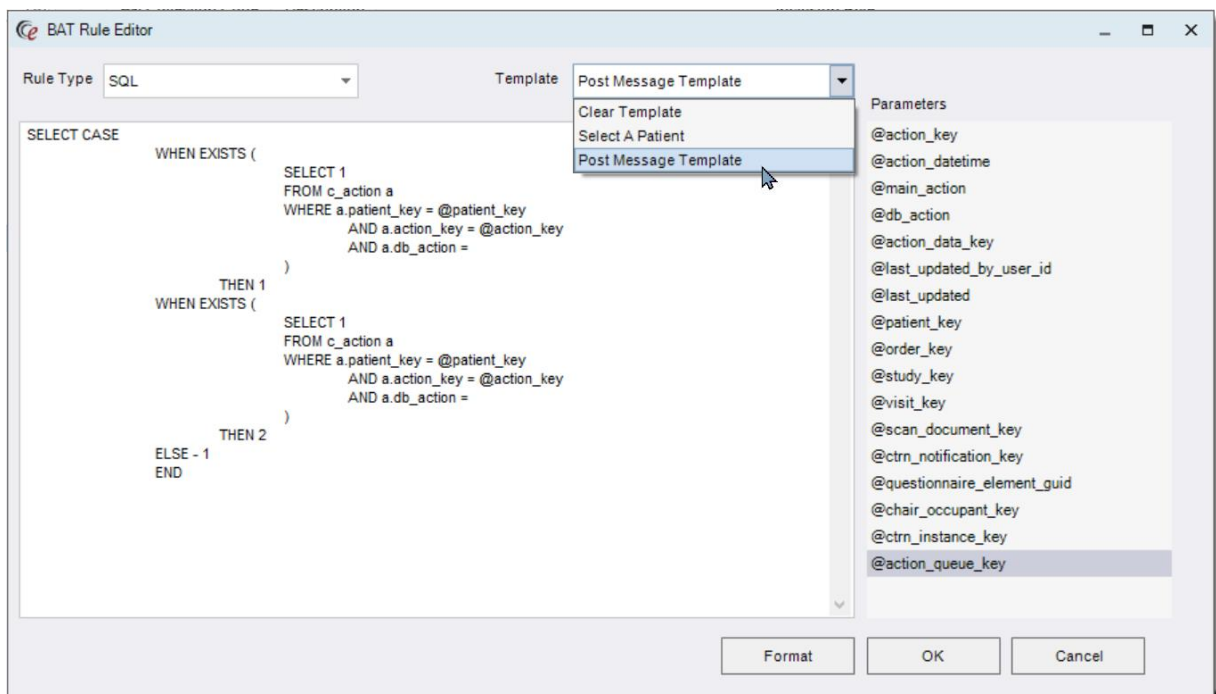
THE BAT RULE EDITOR OFFERS MORE FUNCTIONALITY THAN THE GRID'S EDIT IN PLACE OR THE EDIT IN POPUP OPTIONS.

The `BAT Rule Editor` editor includes functionality to select the rule type (currently limited to SQL), select a rule template, edit rule text, and to insert predefined parameters into the rule:



1. **Rule Type** - Although currently limited to SQL, future enhancements may support other options such as JavaScript or C#.
2. **Template** - Pre-defined rules that may be loaded. The list of available templates is currently hard-coded, although future enhancements may allow customization. Note that the scripts provided as templates are a convenience; these scripts can easily be manually created instead and are typically modified once inserted.
3. **Rule text editor** - A simple scrollable text editor window.
4. **Parameters** - Double-clicking any of the pre-defined parameter fields will insert them at the cursor position.
5. **Format** - Reflows the rule text with appropriate indentation for improved readability.

Note that a `Post Message Template` for each of the available parameters has been created as a basis for new scripts.



THE POST MESSAGE TEMPLATE FOR INCLUSION RULE.

Known Limitations

The following significant limitations have been identified and should be communicated to affected users:

- EXPECTED BEHAVIOR BY DESIGN (FROM #32920) - THE LIST OF TEMPLATES CANNOT BE CUSTOMIZED
 - The list of available templates is currently hard-coded, although future enhancements may allow new templates to be added by administrators.

Configuration Instructions

No System Administrator actions are necessary to enable this feature; however, optional configuration is available:

RIS Client

Changes to RIS AccessString Lookup Table Settings

- Grant `Config.LookupEditor.BATCollection` permissions as necessary.

CEHRT

Feature #34399 - Configurable delay before forwarding reports to Darena's BlueButtonPRO

Summary

This enhancement to CEHRT introduces a configurable delay between the signing of a report in RIS and the forwarding of a C-CDA to FHIR systems to which the patients has enrolled (such as Darena's BlueButtonPRO). This delay is required to comply with California legislation.

Note that this functionality is being delivered via a BAT script.

Background

Previously, FEATURE #29393 introduced a FHIR-based API for patients to access their data through third party system such as Apple Health etc. This functionality has been made available via Darena's BlueButtonPRO.

However, California (legislation) has introduced a requirement for a four-day delay before a patient can access records. As Darena does not support the addition of a lag between the creation of a patient invite and the subsequent sending to the patient, this functionality will be implemented in RIS.

The related FEATURE #31787 - BACKEND AUTOMATION TOOL (BAT) PHASE TWO - RULES, also included in this release, extends the functionality of the Backend Automation Tool (BAT) to create Backend Automation Task (BAT) "scripts" to implement advanced RIS workflows without requiring source code changes.

This "report delay" functionality is an ideal candidate to be implemented as a Backend Automation Task, and its implementation should be reviewed as a training exercise.



WARNING: *BAT scripts should never be deployed into a production system without extensive review and testing.*

Potential consequences of improper scripting can include:

- Data loss
- Data corruption
- Degradation of system performance, including rendering the system non-responsive.

Feature Description

This functionality utilizes the RIS Backend Automation Tool (BAT) to create Backend Automation Task (BAT) "script" to delay the transmission of C-CDAs to Darena's BlueButtonPRO, as required to by California legislation.

The `External Access Delay` BAT script workflow is initiated when an exam reaches either a `Signed` or an `Exam Done Tech Only` status. If the patient is enrolled with Darena's BlueButtonPRO (by providing an

External Access Email), the workflow waits until the number of days specified by a new `FHIRReportForwardingDelay` SystemConfig setting have elapsed before forwarding a C-CDA.

This workflow is composed of three elements that must be configured:

1. Create the Queue Subscription.
2. Create the BAT Collection / BAT Steps.
3. Set the SystemConfig configuration option.

Monitoring and troubleshooting

Once enabled, the `External Access Delay` BAT script workflow will continue to run without user intervention.

Failures are silent, and can be monitored by querying the `c_bat` table (Service Team assistance may be required), e.g.:

```
SELECT TOP 100 * FROM c_bat WHERE bat_collection_code = 'FHIRReportForwardingDelay' AND status_code = 'Error' ORDER BY last_updated DESC
```

Once the BAT script completes, any downstream failures, i.e., after the BAT script has requested the C-CDA be sent, would be monitored as normal by querying the `c_action_queue` table (Service Team assistance may be required), e.g.:

```
SELECT TOP 100 * FROM c_action_queue WHERE queue_name = 'DARENA_Error' ORDER BY last_updated DESC
```

Configuration Instructions

System Administrators must complete the following actions to enable this feature and Service Team assistance is required for some actions.



All California sites must deploy this feature to comply with California legislation.

Note that this functionality is being delivered via a BAT script. Refer to the related **FEATURE #31787 - BACKEND AUTOMATION TOOL (BAT) PHASE TWO - RULES**, also included in this release, for details.

RIS Client

Changes to QueueSubscription Lookup Table Settings

Create a queue subscription to define the specific RIS action(s) that will initiate the workflow:

1. Confirm the following row exists in the `QueueSubscription` RIS Lookup Table, or add it if not:
 - 1.1. `Queue Name` = `BAT`
 - 1.2. `Description` = `Actions that will initiate BAT Collection workflows.`
 - 1.3. `Queue Rows to Acquire` = `10`
2. From the `l_queue_subscription` tab for `BAT`, add the subscription row:
 - 2.1. `queue_name` = `BAT`
 - 2.2. `main_action` = `<All>`
 - 2.3. `Db_action` = `ExternalAccessPatientEnrolled`
 - 2.4. `exclusion_flag` = `N`
3. From the `l_queue_subscription` tab for `BAT`, add the subscription row:
 - 3.1. `queue_name` = `BAT`
 - 3.2. `main_action` = `<All>`
 - 3.3. `db_action` = `ExternalAccessExportStudy`
 - 3.4. `exclusion_flag` = `N`

Remove the previous implementation for forwarding C-CDAs, which did not include this delay:

4. Locate the `Queue Name` = `DARENA` entry and disable it by setting `Active` = `N` (or by deleting the entry).

Changes to BATCollection Lookup Table Settings

Create the new BAT Collection and BAT Steps to perform the workflow.



WARNING: Do not deploy or modify BAT scripts without consulting the Service Team.

Define a BAT Collection for the workflow:

1. Add a new row in the **BATCollection** RIS Lookup Table Editor:
 - 1.1. **Bat Collection Code** = **FHIRReportForwardingDelay**
 - 1.2. **Description** = **Feature #34399 - Configurable delay before forwarding reports to Darena's BlueButtonPRO**
 - 1.3. **Inclusion Rule** - SQL listed below.
 - 1.4. **Active** = **Y**

INCLUSION RULE

```

SELECT CASE
    WHEN EXISTS (
        SELECT 1
        FROM c_patient_extra_info e
            INNER JOIN c_action a ON e.patient_key = a.patient_key
        WHERE e.patient_key = @patient_key
            AND a.action_key =@action_key
            AND patient_extra_info_code = 'ExternalAccessEmail'
            AND a.db_action IN (
                'ExternalAccessPatientEnrolled',
                'ExternalAccessExportStudy'
            )
        )
    THEN 1
    ELSE -1
END
  
```

Define the BAT Steps for the workflow. This workflow consists of only one step:

2. Expand the new **BATCollection** row to add the step:
 - 2.1. **Bat Collection Code** = **FHIRReportForwardingDelay**
 - 2.2. **Step** = **1**
 - 2.3. **Description** = **Feature #34399 - Configurable delay before forwarding reports to Darena's BlueButtonPRO**
 - 2.4. **Active** = **Y**
 - 2.5. **Available Datetime Rule** - SQL listed below.
 - 2.6. **Parameter Calculation Rule** - SQL listed below.
 - 2.7. **Action** - SQL listed below.
 - 2.8. **Pre Workflow Rule** - SQL listed below.
 - 2.9. **Post Workflow Rule** - (none).

AVAILABLE DATETIME RULE:

```
SELECT dateadd(day, @FHIRReportForwardingDelay, sysdatetimeoffset())
```

PARAMETER CALCULATION RULE:

```

SELECT
    (SELECT CAST (value AS INT)
    FROM l_system_config
  
```



```
WHERE system_config_code = 'FHIRReportForwardingDelay') AS
FHIRReportForwardingDelay,
```

```
(SELECT main_action FROM c_action WHERE
action_key = @action_key AND db_action IN ('ExternalAccessPatientEnrolled',
'ExternalAccessExportStudy')) AS main_action,
```

```
(SELECT db_action FROM c_action WHERE
action_key = @action_key AND db_action IN ('ExternalAccessPatientEnrolled',
'ExternalAccessExportStudy')) AS db_action
```

ACTION:

```
INSERT INTO c_post_message (
patient_key
,main_action
,db_action
,order_key
,study_key
,last_updated
,last_updated_by_user_id
,queue_name
,priority
)
VALUES (
@patient_key
,@main_action
,@db_action
,@order_key
,@study_key
,sysdatetimeoffset()
,'system'
,'DARENA'
,'0'
)
```

PREWORKFLOW RULE:

```
SELECT CASE
WHEN EXISTS (
SELECT 1
FROM c_patient_extra_info
WHERE patient_key = @patient_key
AND patient_extra_info_code = 'ExternalAccessEmail'
)
THEN 1
ELSE -1
END
```

Changes to SystemConfig Lookup Table Settings

- California sites should ensure `FHIRReportForwardingDelay` is set to a minimum of 4 days to comply with legislation.

The following related settings were added or updated:

Setting	Default	Purpose
FHIRReportForwardingDelay	Value=Days as Integer, Default=[0]	Number of days after signing to delay forwarding of C-CDA to FHIR systems that patients have enrolled with. Updated by #34399

VERSION DETAILS

Code Stream

The following source code branches have been merged into this release:

