



eRAD RIS

RELEASE ANNOUNCEMENT

Build 4.2024.010

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PUBLICATION HISTORY

Revision	Author	Description
January 24, 2024	Kevin Brooks, Michelle Mahabir / Hilary Saltmarsh	<ul style="list-style-type: none"> Commercial release.

SUMMARY

Release Announcement

This release of ERAD RIS 4.2024.010 introduces simplified Patient Portal "Smart Links" for new account creation.

New Features

This release introduces the following features and enhancements:

Category	Redmine #	Subject	Description
Patient WF: Make Appointment	34410	Simplified Smart Link Account Creation for New Patient Portal Accounts	This enhancement to Patient WF: Make Appointment introduces ability to create and send Smart Links for new account creation.

SORTED BY CATEGORY AND REDMINE

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

FEATURE DETAILS

Patient WF: Make Appointment

Feature #34410 – Simplified Smart Link Account Creation for New Patient Portal Accounts

Summary

This enhancement to Patient WF: Make Appointment introduces ability to create and send Smart Links for new account creation.

Background

Previously, creating a new Patient Portal account was cumbersome due to the criteria needed to authenticate patient information between RIS and the Portal.

Patients sometimes don't know the referring that ordered their exam (may be they know the nurse but not the actual doctor), they may not know the name of site the way we do, or it may have just been too long since their appointment.

Feature Description

With these changes, a "smart link" can be sent to the patient that will assist in new account creation, only requiring date of birth validation to let the account creation begin.

Links are created and sent automatically via a BAT Tool script, or may be sent manually via the Admin Portal.

BAT Tool Script

The BAT rule and action will validate all rules automatically when an exam reaches `ExamDone` status and generate an iCode and send a communication.

However, an iCode will not be created and no communication will be sent to the patient if any of the below conditions fails:

1. The patient already has an established user ID.
2. The patient has no email or phone number to receive the communication.
3. An active (not expired) iCode already exists for the patient.

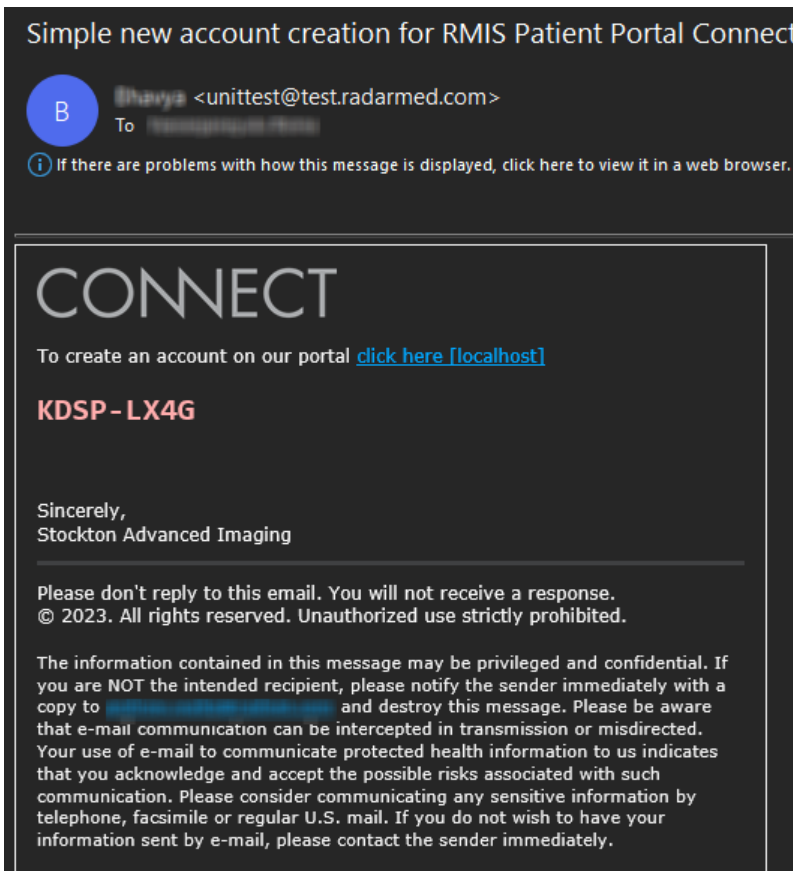
Manual Process

A link can be sent via a manual process, initiated via the Admin Patient Portal on the `Profile` tab:

The screenshot shows the Admin Portal interface with three tabs: Verify, Profile, and iCode. The 'ACCOUNT STATUS' section has a checkbox for 'Account Creation Disabled' and a 'SAVE' button. The 'ACCOUNT CREATION' section features a red-bordered box containing a 'SEND LINK TO CREATE AN ACCOUNT' button, which is highlighted by a red arrow. The 'PROFILE' section includes a 'Prefix' dropdown menu and a 'First Name *' text input field.

ACCOUNT CREATION BUTTON WITHIN THE ADMIN PORTAL TO MANUALLY SEND LINK TO THE PATIENT.

Note that in order to search for a patient within the Admin Portal, the patient must have a study status of scheduled or beyond.



EMAIL/SMS THE PATIENT WILL RECEIVE ONCE ACCOUNT CREATION LINK IS MANUALLY SENT FROM THE ADMIN PORTAL.

User Registration Workflow

Once the link is validated with the patient's date of birth, they will be guided through the account creation process, creating a username, password, and answering security questions.

If the iCode has expired, the patient will receive the following message. A new `ICodeExpirationHoursForAccountCreation` system configuration determines the timeframe allotted for active iCodes.



Sorry, your code has expired and no longer able to create an account with this icode. Please contact us for assistance.

MESSAGE PATIENT WILL RECEIVE IF THE ICODE HAS EXPIRED.

Configuration Instructions

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

RIS Client

Changes to **QueueSubscription** Lookup Table Settings

Add a new queue subscription to the BAT queue to transmit email to patient to initiate new portal account creation:

1. Create a queue subscription to run BAT if one does not already exist:
 - 1.1. `BATQueueName` = `BAT`
 - 1.2. `Description` = `BAT scripts`
 - 1.3. `Queue Rows to Acquire` = `10`
2. From the `l_queue_subscription` tab for `BAT`, add the subscription row if one does not already exist:
 - 2.1. `queue_name` = `BAT`
 - 2.2. `main_action` = `<All>`
 - 2.3. `Db_action` = `<All>`
 - 2.4. `exclusion_flag` = `N`

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.

1. Add a new row in the `BATCollection` RIS Lookup Table Editor:
 - 1.1. `Bat Collection Code` = `PatAcctCreateByICode`
 - 1.2. `Description` = `Feature #34410 - PP Create Account Smart Links`
 - 1.3. `Inclusion Rule` - SQL listed below.
 - 1.4. `Active` = `Y`

INCLUSION RULE:

```
declare @NeedtoCreateIcode char(1) = 'Y'
IF EXISTS (
SELECT 1
FROM c_study
WHERE study_key = @study_key
AND patient_key = @patient_key
AND status_code = 'ExamDone'
AND (
@main_action = 'UI_StudyCompleted'
OR @main_action = 'UI_StudyUpdated'
)
AND @db_action = 'StudyUpdated'
)
```

```

Begin
DELETE
FROM c_bat
WHERE patient_key= @patient_key
AND bat_collection_code = 'PatAcctCreateByICode';
end
else
Begin
    set @NeedtoCreateIcode = 'N'
endif @NeedtoCreateIcode = 'Y'
    Begin
        declare @PatientAccountCreationDisabled varchar(100) = (select top 1 p.patient_id from
c_patient p
        where patient_key = @patient_key
        and patient_portal_disabled_flag = 'Y')
        if @PatientAccountCreationDisabled is not null
            set @NeedtoCreateIcode = 'N'
    endif @NeedtoCreateIcode = 'Y'
    Begin
        declare @ExistingUserId varchar(100) = (select top 1 u.user_id
        from c_user u
        inner join c_study s on s.patient_key = u.patient_key
        where s.study_key = @study_key)
        if @ExistingUserId is not null
            set @NeedtoCreateIcode = 'N'
    endif @NeedtoCreateIcode = 'Y'
    Begin
        declare @ExistingiCode as varchar(50) = (select top 1 i.icode_code
        from c_study s
        inner join c_icode_reference ir on ir.order_key = s.order_key
        inner join c_icode i on i.icode_code = ir.icode_code and i.icode_type = 'C'
        where ir.order_key = @order_key
        and i.active_flag = 'Y'
        and i.expiry_date > getdate()
        )
        if @ExistingiCode is not null
            set @NeedtoCreateIcode = 'N'
    end if @NeedtoCreateIcode = 'Y'
    Begin
        DECLARE @EmailAddress VARCHAR(100) = (
        SELECT TOP 1 email_address
        FROM c_patient_email
        WHERE patient_key = @patient_key
        AND primary_flag = 'Y'
        ORDER BY display_order
        )
        DECLARE @PhoneNumber VARCHAR(100) = (
        SELECT TOP 1 phone_number
        FROM c_patient_phone
        WHERE patient_key = @patient_key
        AND master_mobile_flag = 'Y'
        ORDER BY display_order
        )
        if @EmailAddress is null and @PhoneNumber is null
            set @NeedtoCreateIcode = 'N'
    end if @NeedtoCreateIcode = 'N'
    Begin
        select -1
    end
else
    Begin
        select 1
    end

```

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

2. Expand the new row to add the step:

2.1. `Bat Collection Code` = `PatAcctCreateByICode`

2.2. `Step` = `1`

2.3. `Description` = `Feature #34410 - PP Create Account Smart Links`

- 2.4. `Active` = Y
- 2.5. `Available Datetime Rule` - See below
- 2.6. `Parameter Calculation Rule` - (none)
- 2.7. `Action` - SQL listed below.
- 2.8. `Pre Workflow Rule` - (none).
- 2.9. `Post Workflow Rule` - (none).

AVAILABLE DATETIME RULE:

```
SELECT dateadd(minute, -5, performed_end_date)
FROM c_study
WHERE study_key = @study_key;
```

ACTION:

```
exec c_GeneratorICodeInviteToCreateAnAccountOnPortal @study_key, @order_key, @patient_key
INSERT INTO c_async_job (
  type
  ,last_updated
  ,last_updated_by_user_id
  ,STATUS
  ,job_identifier
)
VALUES (
  'PatientAccountCreationByICode'
  ,sysdatetimeoffset()
  ,'system'
  ,'Pending'
  ,newid()
)
DECLARE @AsyncJobKey INT = @@identity
DECLARE @PhoneNumber VARCHAR(100) = (
  SELECT TOP 1 phone_number
  FROM c_patient_phone
  WHERE patient_key = @patient_key
  AND master_mobile_flag = 'Y'
  ORDER BY display_order
)
if (@PhoneNumber is null)
  set @PhoneNumber = (SELECT TOP 1 phone_number
  FROM c_patient_phone
  WHERE patient_key = @patient_key
  AND mobile_flag = 'Y'
  ORDER BY display_order)

DECLARE @EmailAddress VARCHAR(100) = (
  SELECT TOP 1 email_address
  FROM c_patient_email
  WHERE patient_key = @patient_key
  AND primary_flag = 'Y'
  ORDER BY display_order
)

DECLARE @PracticeCode VARCHAR(100) = (
  SELECT practice_code
  FROM l_site
  WHERE site_code = (
  SELECT _site_code
  FROM c_study
  WHERE study_key = @study_key
  )
)
INSERT INTO c_async_job_config (
  async_job_key
  ,NAME
  ,value
)
VALUES (
```

```

@AsyncJobKey
,'MessageEmailType'
,'email'
)
INSERT INTO c_async_job_config (
async_job_key
,NAME
,value
)
VALUES (
@AsyncJobKey
,'MessageSMSType'
,'sms'
)
INSERT INTO c_async_job_config (
async_job_key
,NAME
,value
)
VALUES (
@AsyncJobKey
,'To'
,@PhoneNumber
)
INSERT INTO c_async_job_config (
async_job_key
,NAME
,value
)
VALUES (
@AsyncJobKey
,'ToEmail'
,@EmailAddress
)

INSERT INTO c_async_job_config (
async_job_key
,NAME
,value
)
VALUES (
@AsyncJobKey
,'PracticeCode'
,@PracticeCode
)INSERT INTO c_async_job_config (
async_job_key
,NAME
,value
)
VALUES (
@AsyncJobKey
,'StudyKey'
,@study_key
)INSERT INTO c_async_job_config (
async_job_key
,NAME
,value
)
VALUES (
@AsyncJobKey
,'RadarAlertType'
,'PORTAL_ICODE'
) INSERT INTO c_async_job_config (
async_job_key
,NAME
,value
)
VALUES (
@AsyncJobKey
,'From'

```



```

        , 'unittest@test.radarmed.com'
    )
    INSERT INTO c_async_job_config (
        async_job_key
        , NAME
        , value
    )
    VALUES (
        @AsyncJobKey
        , 'EmailSubject'
        , 'Portal Account Creation'
    )
    
```

Changes to **Portal applicationsettings.config**

Confirm the BAT service is enabled:

1. `BATQueueName` = `BAT`
2. `StartBat` service should be set to `True`

RIS Client

Changes to ParagraphConfig Lookup Table Settings

The following related settings were added or updated:

Setting	Default	Purpose
AccountCreationInvitationHTMLEmailMessage	Hello: To create an account on our Patient Portal, please {0}	HTML version of the simple account creation invitation email.
AccountCreationInvitationSMSMessage	Hello: To create an account on our Patient Portal, please {0}	Text of the simple account creation invitation SMS.
AccountCreationInvitationTextEmailMessage	Hello: To create an account on our Patient Portal, please click {0}	Plain text version of the simple account creation invitation email

Changes to SystemConfig Lookup Table

The following related settings were added or updated:

Setting	Default	Purpose
IcodeExpirationHoursForAccountCreation	Default=[1]	Value=Hours as Integer, Set to [< 0] to disable, Default=[1] - Number of hours from the time an I-CODE is created to when it will expire for account creation. A negative value indicates no hours added to the current date. Updated by #34410

VERSION DETAILS

Code Stream

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

