eRAD RIS

RELEASE ANNOUNCEMENT

Build 4.2023.084

UPDATED OCTOBER 19, 2023

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PUBLICATION HISTORY

Revision	Author	Description
October 19 2023	Kevin Brooks, Michelle Mahabir / Hilary Saltmarsh	▪ Commercial release.

SUMMARY

Release Announcement

This release of ERAD RIS 4.2023.084 introduces ability to download DICOM images from Patient Portal.

New Features

This release introduces the following features and enhancements:

Category	Redmine #	Subject	Description
Patient Portal	27190	Imagine DICOM download in Patient Portal	This enhancement to Patient Portal adds support for downloading DICOM images from the Patient Exam Detail Page.

SORTED BY CATEGORY AND REDMINE

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

FEATURE DETAILS

Patient Portal

Feature #27190 - Image DICOM Download in Patient Portal

Summary

This enhancement to the Patient Portal adds support for downloading DICOM images from the Patient Exam Detail Page.
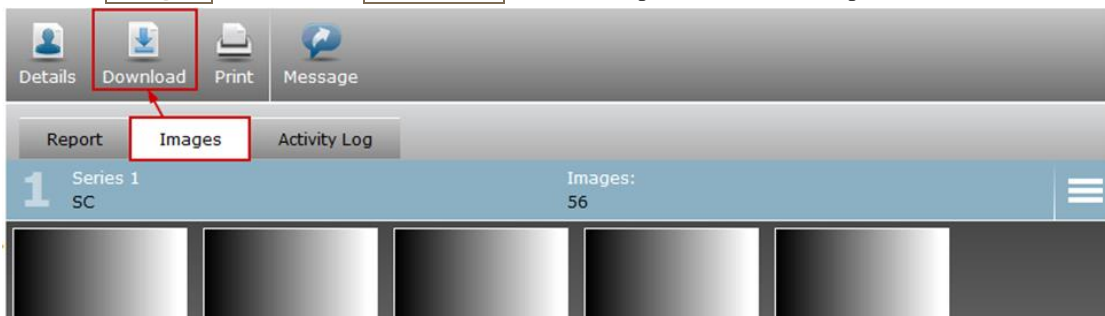
Background

Previously, the ability to download images from the Patient Portal was unavailable.
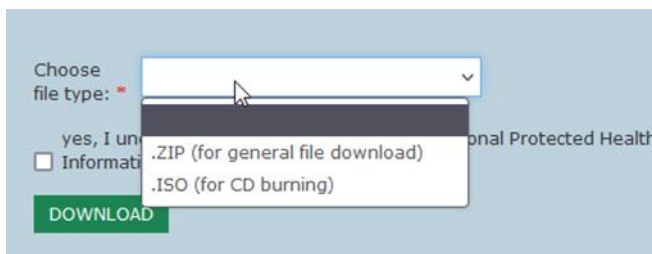
Feature Description

With this change, patients can now download images as DICOM for their selected exam from the Patient Portal.
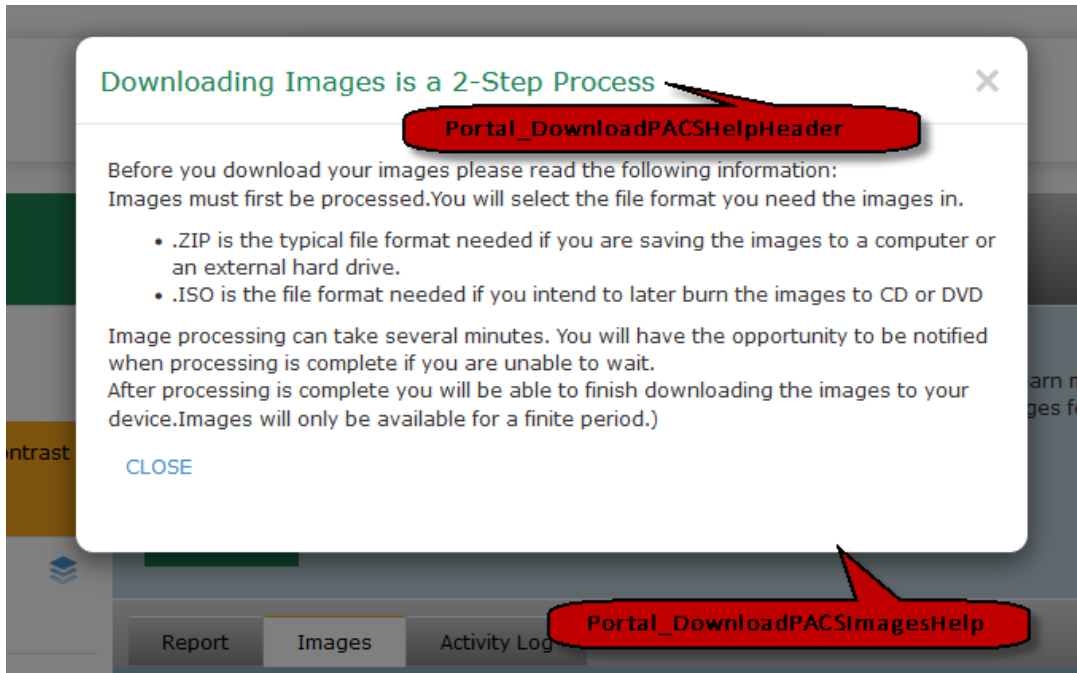
To initiate a download:

1. From the `Images` tab, click the `Download` button to expand the download panel:

2. Select the type of download file (.ZIP, .ISO):
   a. **PortalDicomFileTypeZip**
   b. **PortalDicomFileTypeISO**

3. The first request to download images (or clicking the `Need Help?` link) presents a dialog describing how to use the download feature:

No part of this material may be published, reproduced, stored in a retrieval system, or transmitted in any form or by any means without the prior written permission of eRAD.

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4. Check the consent to download PHI `checkbox`.
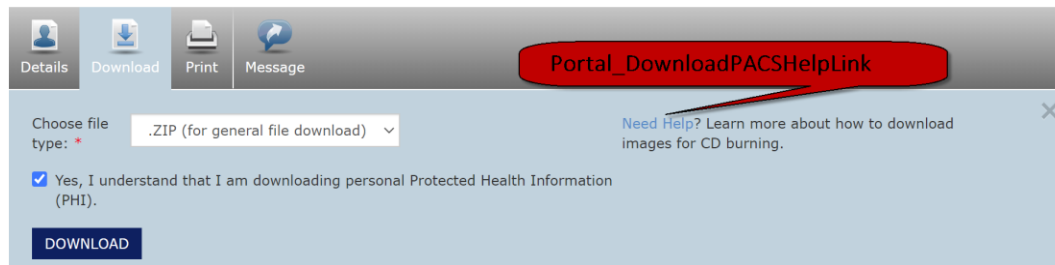
5. Click `Download` to initiate the request:

    - The Portal presents a progress icon while a background process sends a request to PACS to query, retrieve, and package the DICOM in the selected file format.

CT Angiography Head
7-14-2021 | 7:55 AM
Signed1
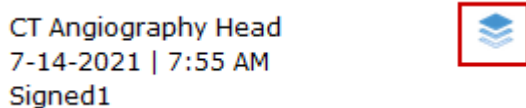
A PROCESSING ICON WILL DISPLAY NEXT TO THE EXAM LIST WHILE THE REQUEST IS PENDING.
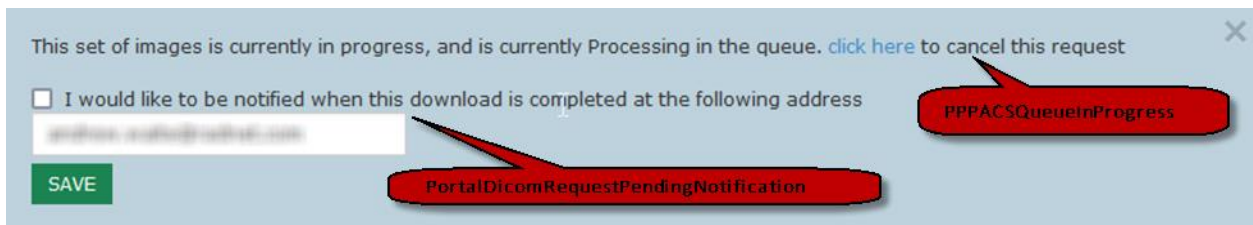
USERS HAVE THE OPTION TO CANCEL THE REQUEST OR TO BE NOTIFIED WHEN THE DOWNLOAD IS AVAILABLE.

6. Once the request is processed and the download is available.

CT Abdomen -- with and withou...
10-14-2020 | 9:35 AM
Signed1

A DOWNLOAD ICON WILL DISPLAY ONCE THE FILE IS AVAILABLE.

THIS ICON WILL ALLOW THE USER TO CLICK ON THEM TO LOAD THAT STUDY AND AUTO FOCUS THE IMAGES TAB, AND EXPAND THE DOWNLOAD BUTTON.

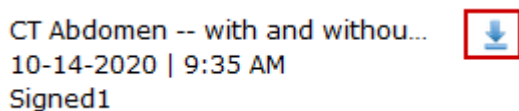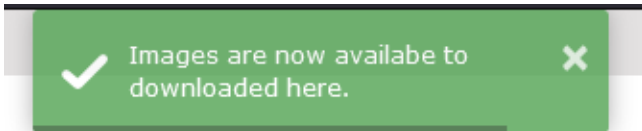7. Upon clicking, the user will receive a notification guiding them back to the downloaded exam.
   a. **PPPACSDownloadIsAvailableNotification**

WHEN CLICKED THE USER WILL BE DIRECTED BACK TO THE DOWNLOADED EXAM.

8. A download dialog box will be presented allowing patient to specify location for download.
   - The File name field be will auto populated as `Accession-ExamFriendlyDescription`
   - If PACS cannot locate the `ExamFriendlyDescription`, the File name with auto populate with the `Accession` only.

9. The last downloaded date and expiry date will be displayed when study is selected.
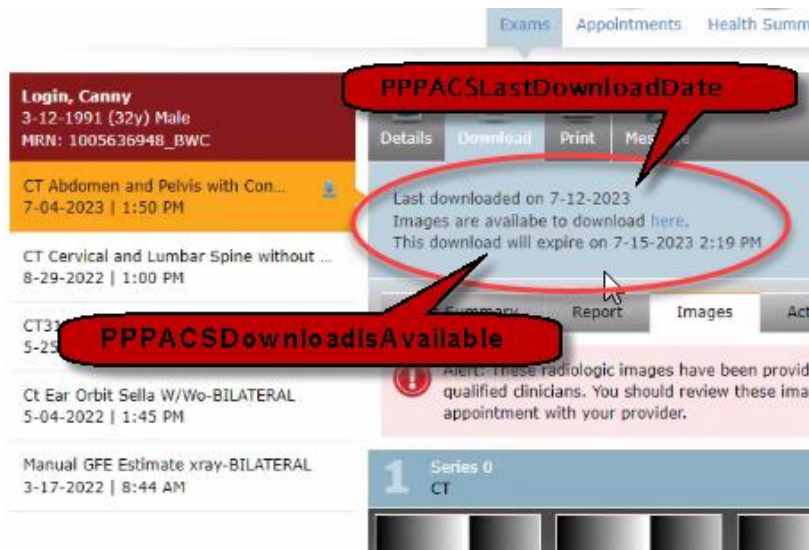
10. All download request will be stored in the database and a history is available via the `Patient's Account Page` in the Image Download tab.
    a. A similar grid is available to the Portal Admin to View/Cancel/Remove image request that are pending/downloading.

			Created	Completed	Download	
My Profile	Security	Authorized Access	**Image Download**			
Exam Date	Exam Description		Created	Completed	Download	
7/29/2021	CT Abdomen with -- Contrast		9/01/2022	9/01/2022		Remove
7/14/2021	CT Angiography Head		9/01/2022	9/01/2022		
7/28/2021	CT Abdomen with -- Contrast		9/01/2022	9/01/2022		
7/29/2021	CT Abdomen with -- Contrast		9/01/2022	9/01/2022		
7/14/2021	CT Angiography Head		9/01/2022	9/01/2022		
7/14/2021	CT Angiography Head		9/01/2022	9/01/2022		
7/28/2021	CT Abdomen with -- Contrast		9/01/2022	9/01/2022		
7/14/2021	CT Angiography Head		8/31/2022	8/31/2022		
7/28/2021	CT Abdomen with -- Contrast		8/31/2022	8/30/2022		
7/29/2021	CT Abdomen with -- Contrast		8/30/2022	8/30/2022	8/30/2022	

1 2 3 Next »   10 ∨ of 28 Rows

THIS WILL ALLOW THE USER TO SEE WHEN THE REQUEST WAS CREATED AND WHEN THE DOWNLOAD WAS COMPLETED.

Download Limiting

To prevent abuse, users are limited to the frequency and number of downloads. This criteria will be controlled via new system configuration settings. If the user does exceed one of these restrictions, they will be prompted to delete an active request and the download form will be disabled.

The Image Download tab can be accessed to remove any pending downloads to help alleviate the queue.

- The `PortalPACSMediaRequestQueueLimit` System Config setting limits the number of requests a user can be downloading concurrently. No additional requests can be started (queued) until an active request completes.
- The `PortalPACSMediaRequestDownloadLimit` System Config setting limits the number of study files a user can have downloaded at any given time. No additional files will be downloaded until a previous file has been removed via the `PortalPACSMediaDownloadAutoDeleteHours` setting or manually by the user.

Additionally, if the URL for the current active session is modified to a different media session ID, which is not associated to the active user, a message from `PortalDicomFileDoNotHaveAccess` will present and notify the user that they do not have access to download the file.

Known Limitations

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

- KNOWN BEHAVIOR (FROM #34653)

    The notification message that indicates when downloads are ready is not being displayed. However, this does not impact the overall functionality of Feature #27190.

There is additional functionality planned for a future release that will change the implementation approach, and is expected to impact how this feature will be configured:

- A related future enhancement will add support for downloading DICOM images from the Provider Portal: FEATURE #30949 - IMAGE DICOM DOWNLOAD IN PROVIDER PORTAL

Service Team Upgrade Instructions

The Service Team must complete the following actions to deploy this feature:

Portals

See also CHANGES TO PARAGRAPHCONFIG LOOKUP TABLE.

Changes to applicationsettings.config

- Enable this feature by setting `PACSImageDownloading` to `True` **and**;

- Setting the `DICOM_Download` appconfig option to `True` for any PACS servers that are associated with the desired images.

Changes to ParagraphConfig Lookup Table

Paragraph Config Code	Default	Description

Portal_DownloadPACSImagesHelp	Process for Downloading Images
	
	Downloading Images is a two-step process:
	1. Select images to be processed:
	  o Select the file format for your images:
	    ▪ .ZIP is the typical format when saving images to a computer or an external hard drive.
	    ▪ .ISO is used if you intend to later burn the images to CD or DVD.
	2. Download processed images to your device.
	  o Image processing can take several minutes. You will be notified when processing is complete.
	  o Once processed, images will only be available for a finite period.
		Help dialog text displayed to provide directions on how the download process works.
		May include system config values for queue limits:
		- {0} PortalPACSMediaRequestActiveQueueLimit
		- {1} PortalPACSMediaRequestAvailableDownloadLimit
		- {2} PortalPACSMediaDownloadAutoDeleteHours
		Updated by #27190

Portal_DownloadPACSImagesHelpLink	{Need Help?} Learn more about how to download images for CD burning.	Link to directions on how the download process works. Displayed on right side of download form. Updated by #27190
Portal_DownloadPACSImagesHelpHeader	How To Download Images	Title text of help dialog displayed to provide directions on how the download process works. Updated by #27190

Paragraph Config Code	Default	Description
PortalDicomFileDoesNotExsist	There was a problem downloading your images, please make a new request.	The message to display if a user attempts to download a file that was manually removed from the server. Updated by #27190
PortalDicomFileDoNotHaveAccess	You do not have access to this download.	The message to display if a user attempts to download a file not associated to them. Updated by #27190
PortalDicomFileTypeISO	.ISO (for CD burning)	Text displayed in the `Choose file type:` dropdown. Updated by #27190
PortalDicomFileTypeZIP	.ZIP (for general file download)	Text displayed in the `Choose file type:` dropdown. Updated by #27190
PortalDicomRequestPendingNotification	I would like to be notified at the following address when this file is completed and available for download.	Checkbox text displayed for option to notify the patient when request is processed and available for download. Updated by #27190
PortalDicomWillBeNotified	Your request to be notified has been updated.	Text displayed when a user updates desired notification information. Updated by #27190
PPPACSActiveQueueLimit	You are limited to {0} active downloads, to be able to download these images, you will have to cancel an active request, click <here> to review image requests.	Text displayed when `PortalPACSMediaRequestQueueLimit` has been exceeded. Updated by #27190
PPPACSDownloadIsAvailable	Images are available to download {0}. This download will expire on {1}	Text displayed once a file is available to download, which will also contain the link for the download. Updated by #27190
PPPACSDownloadIsAvailableNotification	Requested images are now available. Click to be directed back to the download.	Toast notification displayed when a file becomes available to download. Updated by #27190
PPPACSImageReadyForDownloadSubject	Images ready for download.	Email Subject sent when a file becomes available to download. Updated by #27190
PPPACSImageReadyForDownload	Your images are now available to download from the portal {0}.	Email message html sent when a file becomes available to download. Optionally includes link referring back to the study. Updated by #27190
PPPACSImageReadyForDownloadText	Your images are now available to download from the portal at {0}.	Email message text sent when a file becomes available to download. Optionally includes link referring

Paragraph Config Code	Default	Description
		back to the study. Updated by #27190
PPPACSLastDownloadDate	Last downloaded on {0}.	Text displayed with the most recent date when a file has previously been downloaded. Updated by #27190
PPPACSQueueInProgress	This set of images is currently in progress, and is currently {0} in the queue. Click <here> to cancel this request.	The message to display to the patient portal user when the study is currently in the PACS request queue. Updated by #27190

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 SystemConfig Lookup Table

- Configure `PPPACSMediaDownloadLocation` for your installation.

The following related settings were added or updated:

Setting	Default	Purpose
PPPACSMediaDownloadLocation	Value=Path as String [a network share or local drive], Default=[C:\PACS_Media_Files\]	Target path to save downloaded PACS image files requested via the Patient Portal. Updated by #27190
PortalPACSMediaDownloadAutoDeleteHours	Value=Hours as Integer, Default=[72]	Number of hours PACS image files will be available for download from the server. Updated by #27190
PortalPACSMediaRequestDownloadLimit	Value=Image Files as Integer, Default=[10]	Maximum number of downloaded PACS study image files allowed per user. Additional studies allowed after cleanup by `PortalPACSMediaDownloadAutoDeleteHours`. Updated by #27190
PortalPACSMediaRequestQueueLimit	Value=Requests as Integer, Default=[3]	Maximum number of (concurrent) queued PACS image requests allowed per user. Updated by #27190

VERSION DETAILS

Code Stream

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

```
4.2023.074  →  4.2023.074.0.1  →  4.2023.074.0.2
    │
    ▼
4.2023.075
    │
    ▼
4.2023.076  →  4.2023.076.0.1  →  4.2023.076.0.2
    │
    ▼
4.2023.077
    │
    ▼
4.2023.078
    │
    ▼
4.2023.079  →  4.2023.079.0.1
    │
    ▼
4.2023.080
    │
    ▼
4.2023.081
    │
    ▼
4.2023.082
    │
    ▼
4.2023.083
    │
    ▼
4.2023.084
```

Legend:

- **Latest commercialized release**
- **Story release** (green)
- **Hotfix release** (orange)
- **Rapid release** (blue)
- **Internal test release** (gray)
- **Recalled release** (red)