



eRAD RIS

# RELEASE ANNOUNCEMENT

Build 4.2025.053

UPDATED OCTOBER 17, 2025

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## PUBLICATION HISTORY

Revision	Author	Description
October 17, 2025	Kevin Brooks/ Felicia Ellis	▪ Commercial release.

# SUMMARY

## Release Announcement

*This release of ERAD RIS 4.2025.053 enhances image display and reporting workflows by supporting key image embedding in diagnostic reports and improving error handling in the Referring Portal when no images are available.*

## New Features

This release introduces the following features and enhancements:

Category	Redmine #	Subject	Description
Radiology Reporting	7704	Support Key Images from eRAD PACS and support them in RIS Reporting	This enhancement to Radiology Reporting introduces optional support for embedding key images into diagnostic reports generated from eRAD RIS.

SORTED BY CATEGORY AND REDMINE

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

## Resolved Issues

This release resolves the following issues:

Category	Redmine #	Subject
Provider Images	33075	Referring Portal Images Tab Blank when Response Results Count is Zero

SORTED BY CATEGORY AND REDMINE

# FEATURE DETAILS

## Radiology Reporting

### Feature #7704 – Support Key Images from eRAD PACS and Support them in RIS Reporting

#### Summary

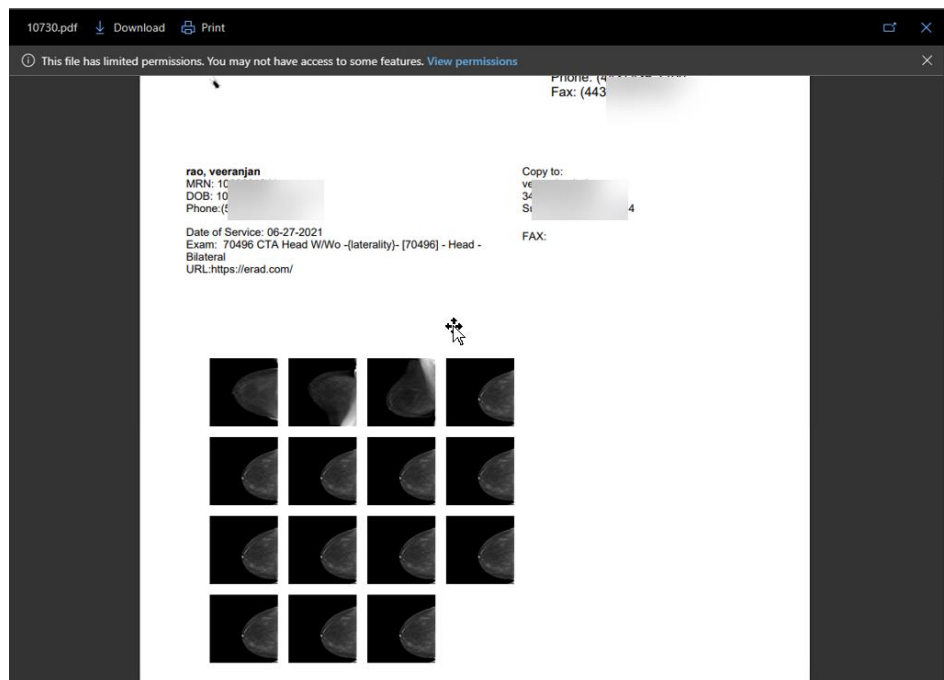
This enhancement to Radiology Reporting introduces optional support for embedding key images into diagnostic reports generated from eRAD RIS.

#### Background

Previously, key images in reporting were only accessible via the Portals interface. There was no support mechanism for embedding key images directly into reports generated through eRAD RIS.

#### Feature Description

With this change, enabling the new `KeyImagesOnReportEnabled` allows key images to be automatically retrieved from PACS and rendered in the diagnostic report in a customizable layout. Using the SSRS template the maximum number of images to be displayed can be customized.



EMAILED PDF SENT BY RIS THROUGH DOCUMENT DISTRIBUTION:

New checkbox settings in the Referring **Edit Address** dialog settings control whether key images are included in distributed reports. When the feature is disabled, reports behave as they did previously, with no embedded images.

PERSONELL LOOKUP'S **EDIT ADDRESS** DIALOG

## Service Team Upgrade Instructions

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

### SSRS Report Configuration

To configure thumbnails, complete the following three steps:

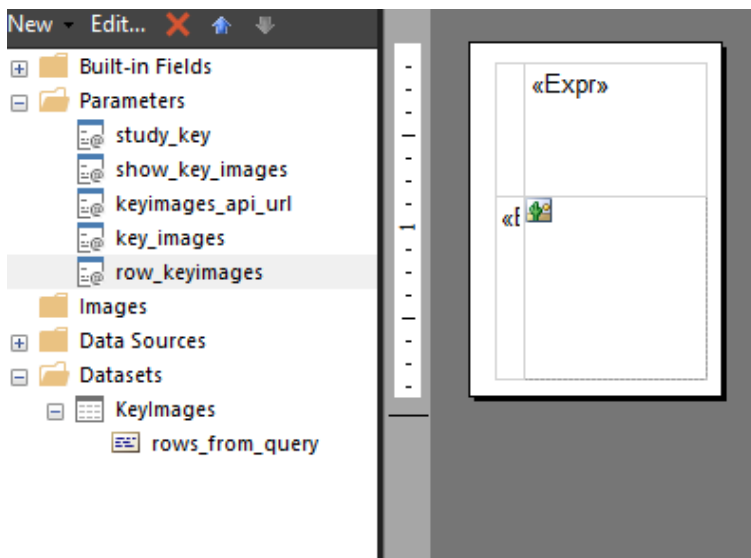
1. Create a sub report to display the thumbnails
2. Call sub report from main report
3. Test the new report in both RIS Client and three portals.



*A sample report and other reference documents are attached to Redmine Feature #7704.*

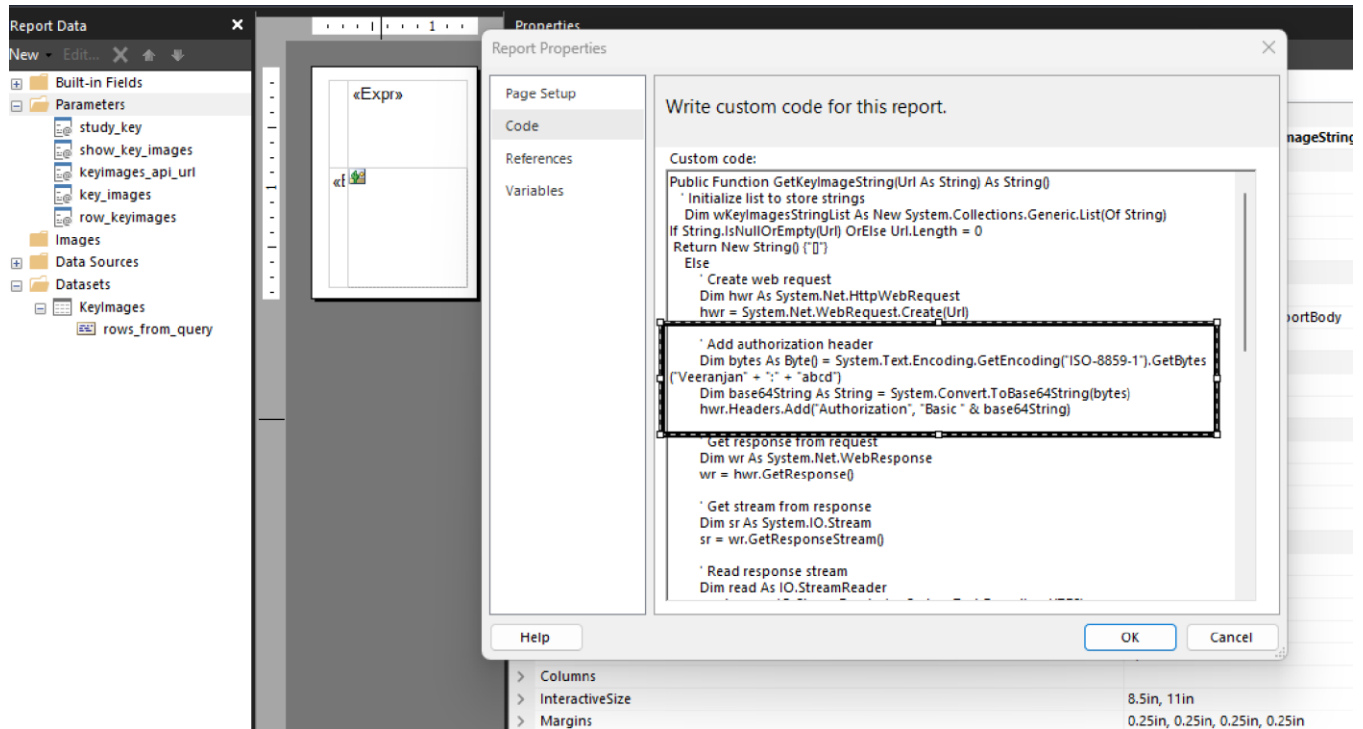
### Create a sub report to display the thumbnails

1. Create a new sub report, e.g. **SampleKeyImages** with the following parameters.



#### Parameter details:

- Study key: Integer type, visibility is visible, default value can be valid any integer.
- Show key images: Boolean parameter, default value is false, value is from main report (subreport section), data type Boolean, visibility is visible.
- Keyimages api url: contains method information needed for the call to get key images. Passes study key and image size as arguments to the method. It will be hidden as there is no need to show anywhere. Data type is Text, allow blank and null value. Default value, e.g.:  
`=IIF(Parameters!show_key_images.Value,  
"http://localhost:9002/api/PACS/GetKeyImages?aStudyKey=" & Parameters!study_key.Value &  
"&aImageSizeWidth=250", "").` Here, <http://localhost:9002> is from "chairServiceURL" in applicationsettings.config under ris services.
- Key images: If API url is empty or show images value is false, return nothing. Otherwise, use custom code to call API and get required key images. Passing credentials (RIS login) to get authorized to access API is part of the custom code function. To view custom code, right click on grey color in report builder and select Report Properties » Code.



Default value for this parameter is

```
=IIF(Parameters!show_key_images.Value = True AND Parameters!keyimages_api_url.Value <> "",  
Code.GetKeyImageString(Parameters!keyimages_api_url.Value), "")
```

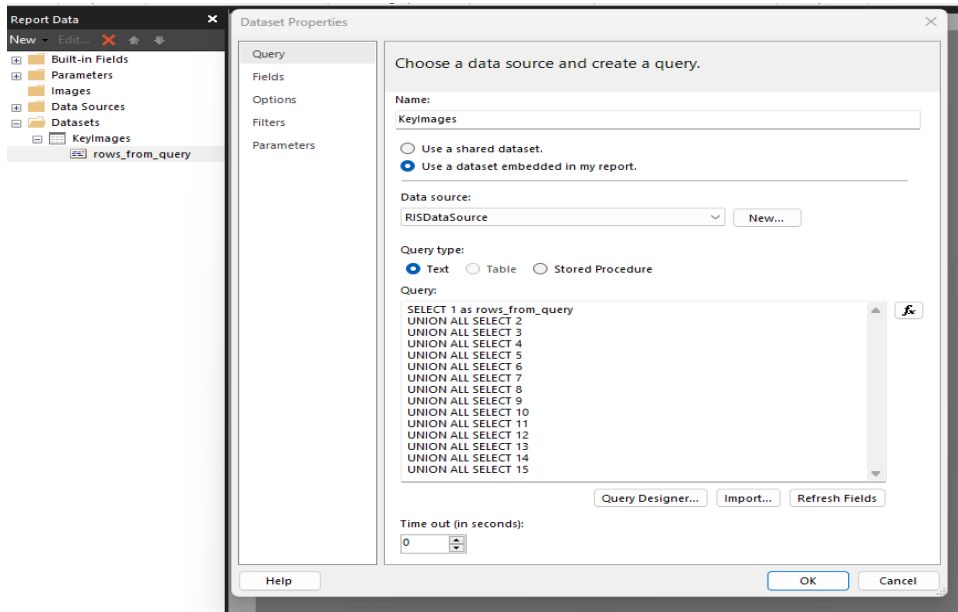
Data type is Text, allow blank value and multiple values. Parameter visibility is hidden.

- **Row keyimages:** it is for how many images can be shown in a row which will be shown on the report on each row. Default value is 4. Images per row depending on the size of the image which can be modified under Image properties. Data type is Integer and visibility is hidden.
- 2. Create a new data set called “KeyImages” which has a calculated field “rows\_from\_query” and Field source(rows\_from\_query).

Add rows according to desired number of key images in the Query type “text” section, e.g.:

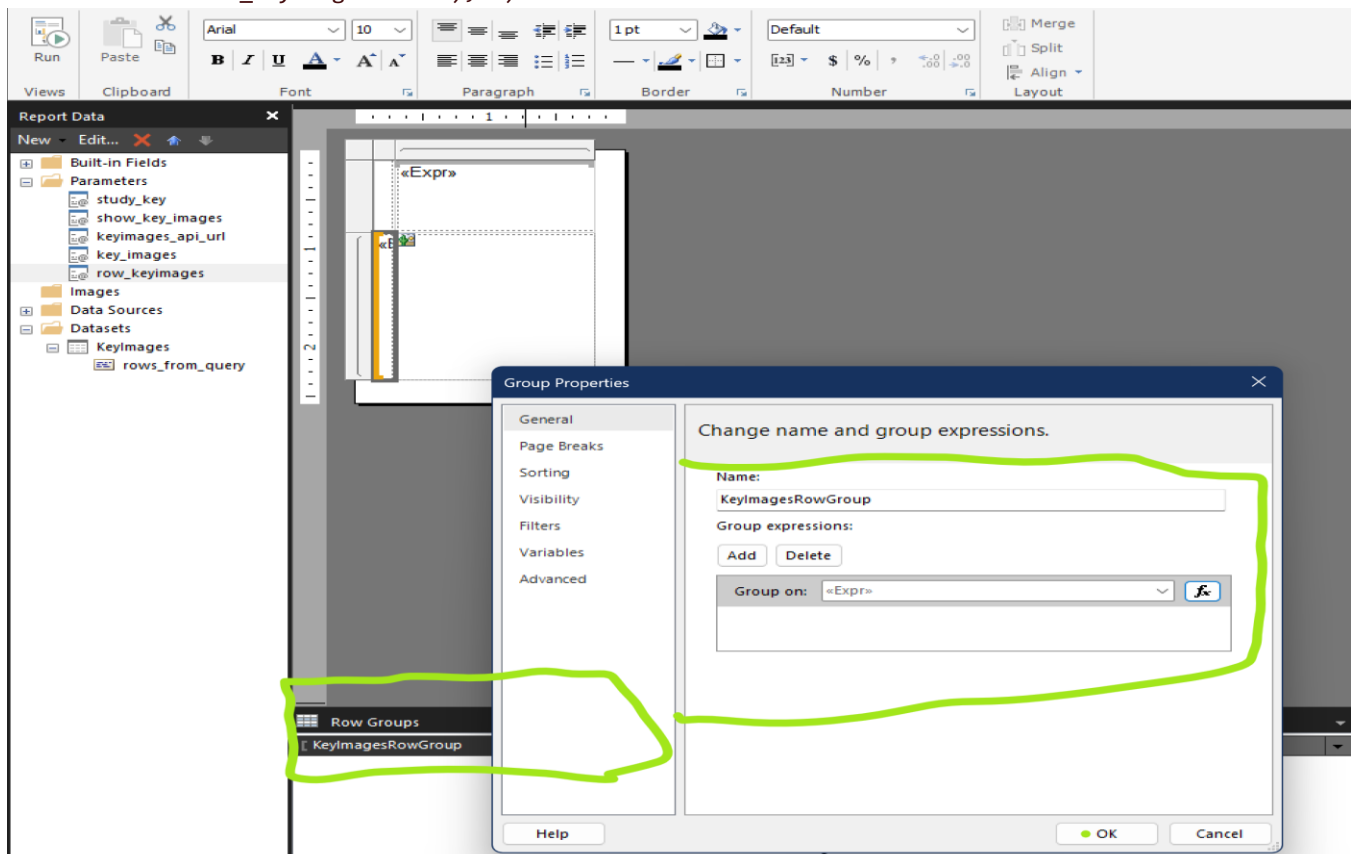
```
SELECT 1 as rows_from_query  
UNION ALL SELECT 2  
UNION ALL SELECT 3  
UNION ALL SELECT 4  
UNION ALL SELECT 5 etc.
```

For example, to display 15 key images, add 15 rows:



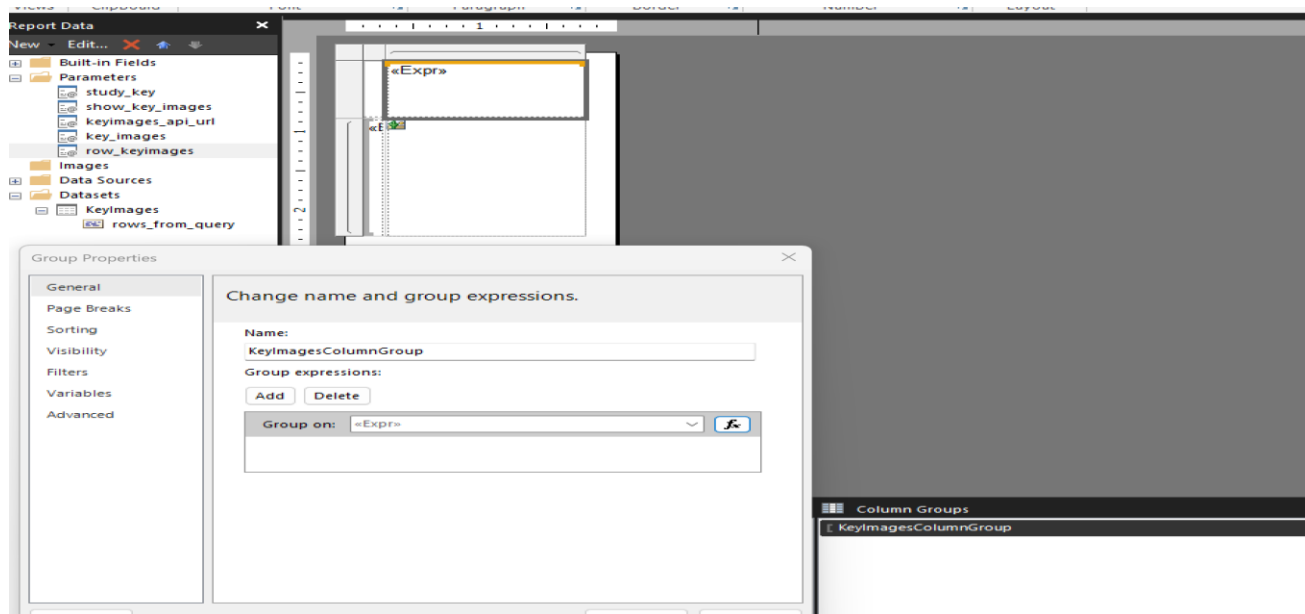
- Ensure sure DataSource has been selected.
- 3. Insert a matrix with row grouping, column grouping, and inserted image in the Data field:
  - Row is hidden as no need to show details.
  - Use row group expression:
 

```
=IIF(Parameters!key_images.Value(0) <> "[ ]", Ceiling(Fields!rows_from_query.Value / Parameters!row_keyimages.Value), 0)
```



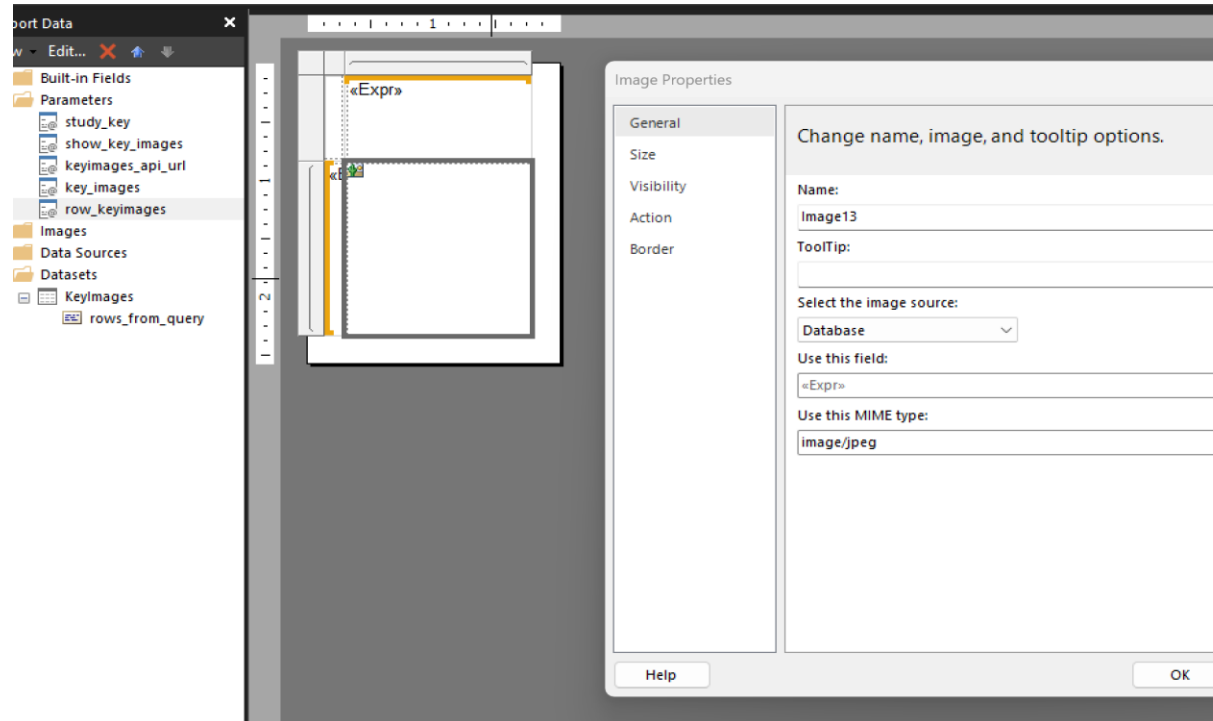
- Column is hidden as no need to show details.
- Use column group expression:
 

```
=IIF(Parameters!key_images.Value(0) <> "[ ]", Fields!rows_from_query.Value Mod Parameters!row_keyimages.Value, 0)
```



4. Inserted an image on Data field in an expression:

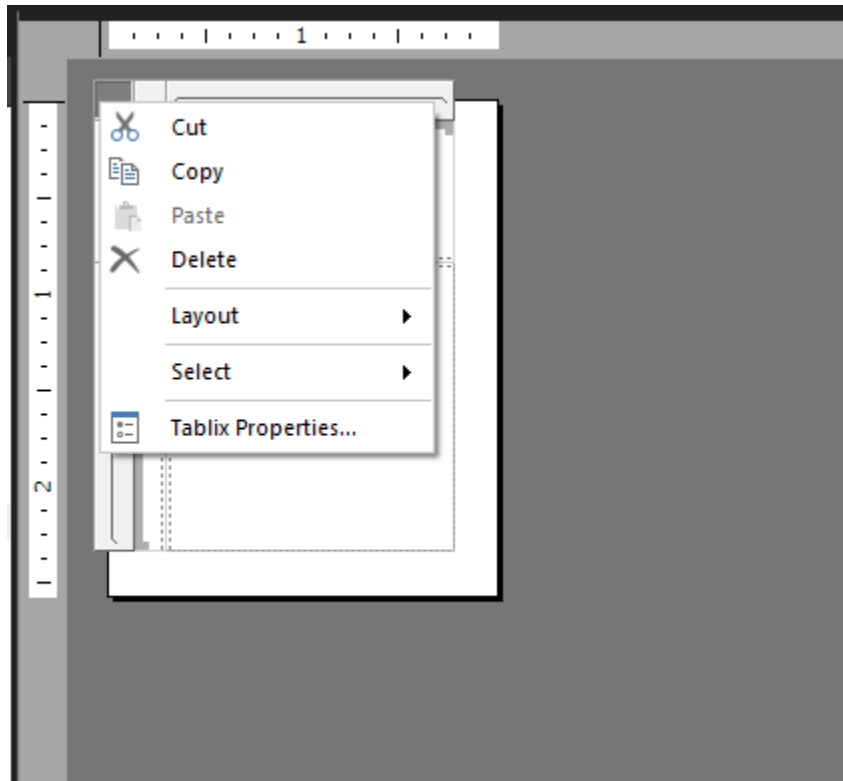
```
=Code.GetKeyValue(Parameters!key_images, Fields!rows_from_query.Value)
```



- Visibility is based on show or hide on an expression  
`=Fields!rows_from_query.Value > Parameters!key_images.Value.Length OrElse  
Parameters!key_images.Value.Length <= 0 OrElse Parameters!key_images.Value(0) = "["]`
- Sizing is "FIT"

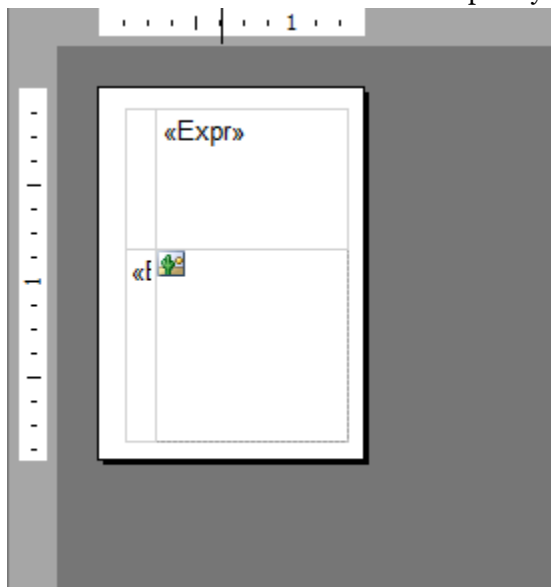
5. Right click on matrix and look for Tablix properties





- Visibility depends on expression  
`=NOT(Parameters!show_key_images.Value) OrElse Parameters!key_images.Value.Length <= 0  
 OrElse Parameters!key_images.Value(0) = "[ ]"`
- Under General, select page break options (Keep together on one page if possible) and make sure selected the dataset name (KeyImages).

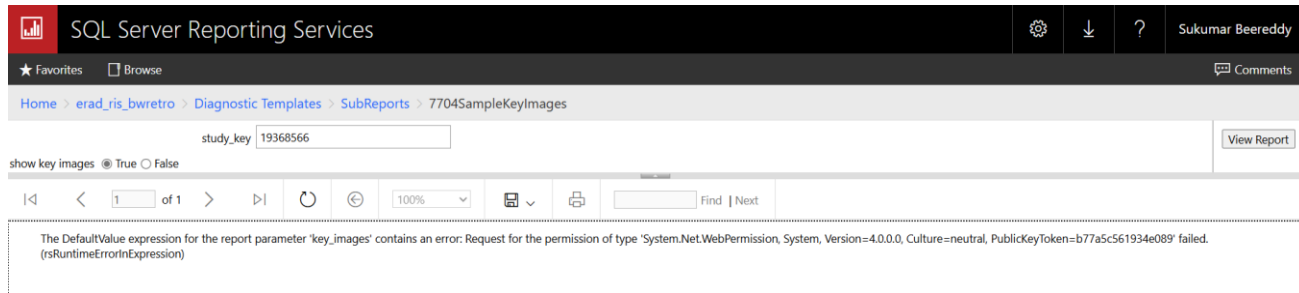
6. Refer to the attached samplekeyimages document in Redmine.



- Change image size in SSRS according to the preference under image properties, accepts in or pt.
- Refer to sample key image sub report attached to Redmine Feature #7704.
- Refer to sample diagnostic report attached to Redmine Feature #7704.

#### Troubleshooting:

**Problem:** You encounter the following error:



**Solution:** Update permissions to full trust by adding the following configuration under the `<NamedPermissionSets>` element in `C:\Program Files\Microsoft SQL Server Reporting Services\SSRS\ReportServer\rssrvpolicy.config`

- `<PermissionSet class="NamedPermissionSet" version="1">`  
`<IPermission class="System.Net.WebPermission, System, Version=4.0.0.0,`  
`Culture=neutral, PublicKeyToken=b77a5c561934e089" version="1" Unrestricted="true"/>`  
`</PermissionSet>`

➤ Change `PermissionSetName` from nothing to `FullTrust` for the class `FirstMatchCodeGroup`.

```

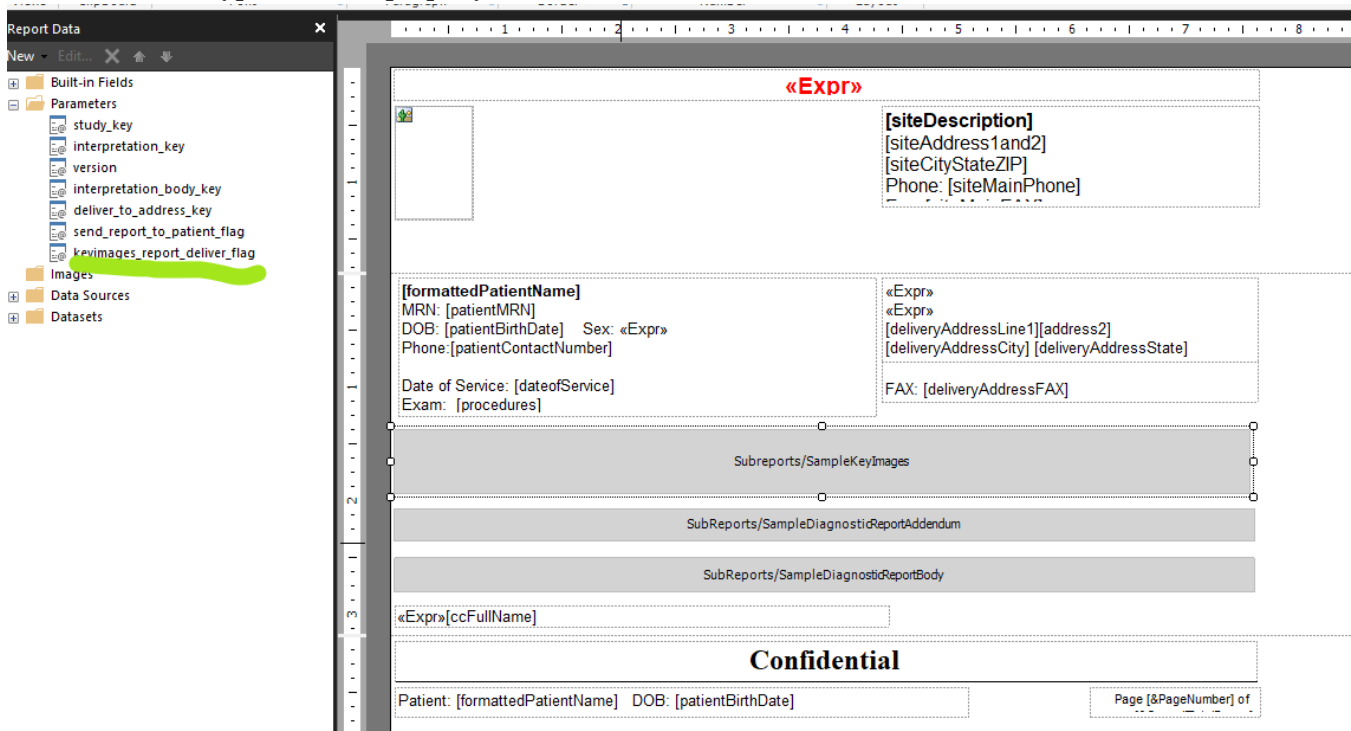
26      </SecurityClasses>
27      <NamedPermissionSets>
28      <PermissionSet class="NamedPermissionSet" version="1" Unrestricted="true" Name="FullTrust" Description="Allows full access to all resources" />
29      <PermissionSet class="NamedPermissionSet" version="1" Name="Nothing" Description="Denies all resources, including the right to execute" />
30      <PermissionSet class="NamedPermissionSet" version="1" Name="Execution">
31      <IPermission class="SecurityPermission" version="1" Flags="Execution" />
32      <PermissionSet class="NamedPermissionSet" version="1">
33      <IPermission class="System.Net.WebPermission, System, Version=4.0.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089" version="1" Unrestricted="true" />
34      </PermissionSet>
35      </NamedPermissionSets>
36      <CodeGroup class="FirstMatchCodeGroup" version="1" PermissionSetName="FullTrust">
37      <IMembershipCondition class="AllMembershipCondition" version="1" />
38      <CodeGroup class="UnionCodeGroup" version="1" PermissionSetName="Execution" Name="Report_Expressions_Default_Permissions" Description="This code group grants permissions to the report expressions." />
39      <IMembershipCondition class="StrongNameMembershipCondition" version="1" PublicKeyBlob="002400000480000094000000060200000024000005253413100040000010001005" />
40      </CodeGroup>

```

## Call sub report from main report

### Update Main Report:

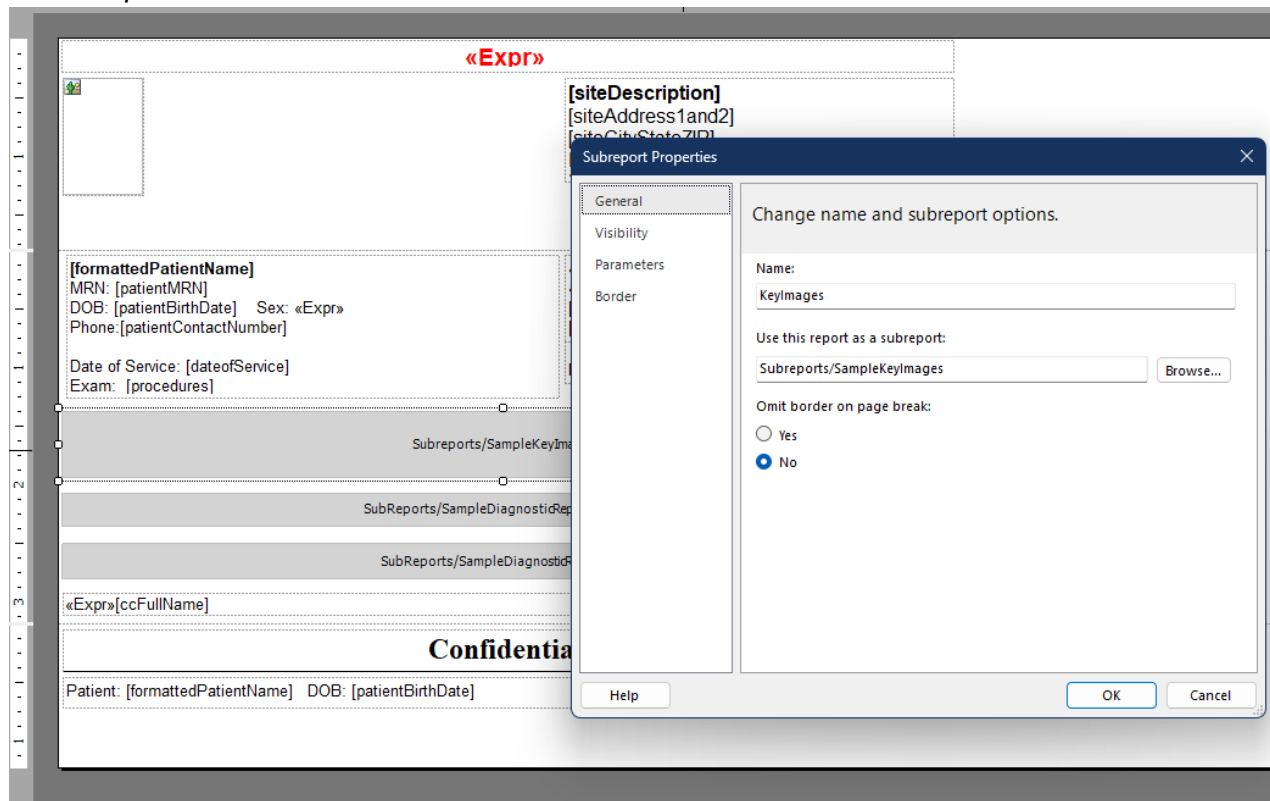
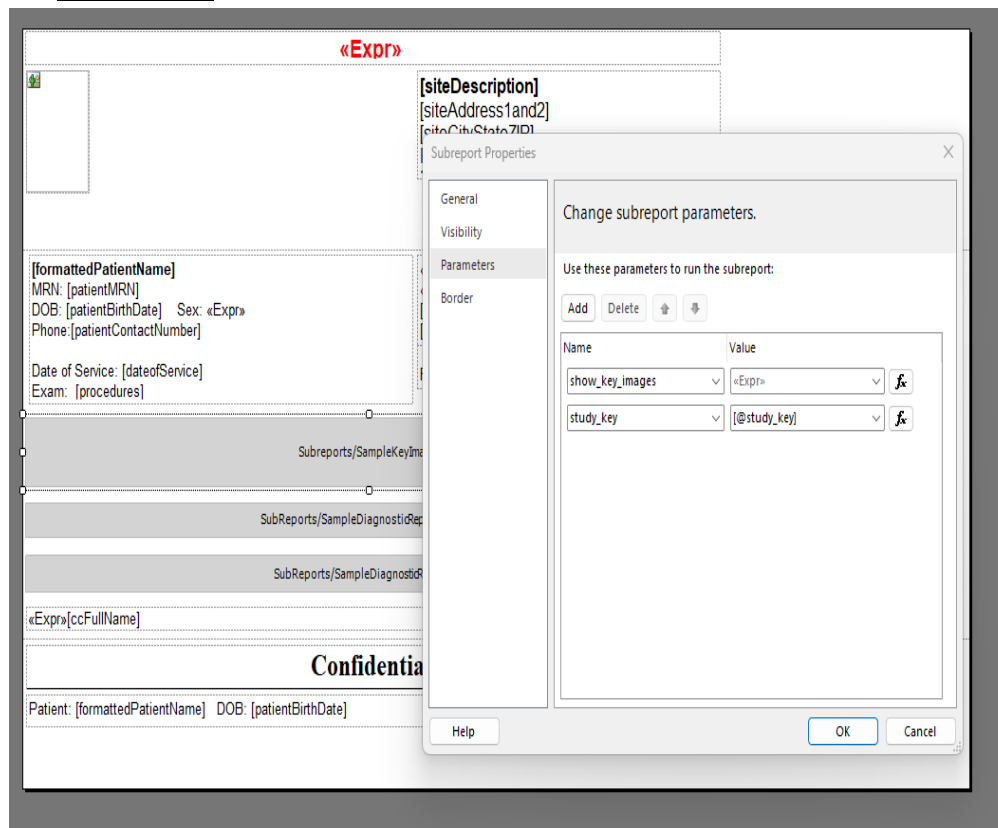
1. Create subreport section in “SampleDiagnosticReport” as the value “Subreports/SampleKeyImages”.
2. Add new parameter called “keyimages\_report\_deliver\_flag”
  - Data type for above property is “Text” and visible is selected and default value is “N”



## 3. Right click on subreport properties

○ Visibility:

```
=IIf(Parameters!keyimages_report_deliver_flag.Value.ToUpper() = "N",  
True, False)
```

○ Parameters:

- Per above image, the Show\_key\_images: value expression is =IIF(Parameters!keyimages\_report\_deliver\_flag.Value.ToUpper() ="N", false, true)
- The sub-report section appears based on newly created Boolean parameter "show\_key\_images", value from app config for portals and system config for RIS, and will display as part of the url when trying to access diagnostic report from the portal.

### Test the new report in both RIS Client and three portals.

Confirm the functionality to retrieve images by pasting the following into a browser:

```
http://< chairserviceurl >/api/PACS/GetKeyImages?aStudyKey="&Parameters!<studykey>
& "&aImageSizeWidth=250", "")
```

Note: obtain the `chairserviceurl` from `ris.exe.config`.

## Portals

### Changes to applicationsettings.config

- Created new app config KeyImagesOnReportEnabled:
  - Default value is False.
  - When False, no image request is made and reports render as they do today.
  - When True, adds request for key images as part of the URL to call SSRS to get the report along with key images on the report.

## Web Services

### Changes to web.config

- New setting `WebPACSRequestTimeoutForKeyImages`: Default value is `10000`
- New setting `WebPACSStudyStatusLoopInterval`: Default value is `5000`

## 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

- Enable this feature by setting `KeyImagesOnReportEnabled` to `True`.
  - When False, no image request is made and reports render as they do today.
  - When True, RIS will request key images during report generation and include them in the PDF if available.

The following related settings were added or updated:

Setting	Default	Purpose
KeyImagesOnReportEnabled	Value=Boolean, Default=[False]	When True, key images will be sent to SSRS report via a web API call to display on the report. Updated by #7704

# VERSION DETAILS

## Code Stream

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

