



KONICA MINOLTA

Data Migration Guide (Opal-RAD to Symmetry Sync)

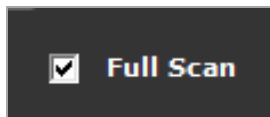
500-000934 Rev B

1 Opal-RAD Configuration

1. Launch the Opal-RAD Studylist Client (use the desktop shortcut).



2. Confirm that the **Full Scan** box is checked.



3. Check the number of total studies listed in the near the bottom-right corner and notate. See the following example:



4. Click the Admin tab and select **Send Destination**.



5. Click the **Add New** button and complete the following fields in the Add group box.

When you are done, the **Edit** button changes to **Add**. Click **Add**.

6. Continue to add three additional Send destinations, named **MIGRATION2**, **MIGRATION 3**, and **MIGRATION4**.
7. To find the current IP address of the new Symmetry Sync Server, complete the following steps:
- On the Symmetry Sync PC, click the **Windows Start** button and type **cmd** in the search box.
 - In the command prompt box, type **ipconfig**.
 - Look for the IPv4 Address listed under the current network adapter that connects to the local office network. See the following example:

```
Wireless LAN adapter Wi-Fi:

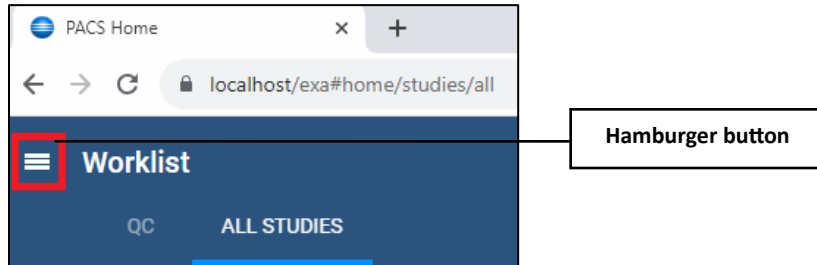
Connection-specific DNS Suffix . : 
Link-local IPv6 Address . . . . . : fe80::636:7524:9f7d:fa80%12
IPv4 Address. . . . . : 10.27.179.153
Subnet Mask . . . . . : 255.0.0.0
Default Gateway . . . . . : 10.128.128.128
```

NOTE: The IP address on the Symmetry Sync server does **not** need to be static; it can be assigned dynamically during the temporary data migration process. However, please keep the Symmetry Sync PC powered on; if it is turned off, the IP address may change, and data migration may be interrupted.

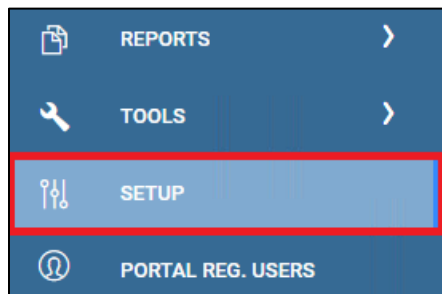
2 Validate Symmetry Sync ready for DICOM Receive

Complete the following steps to confirm that the Symmetry Sync system is configured properly and ready to accept DICOM images from Opal-RAD and other systems.

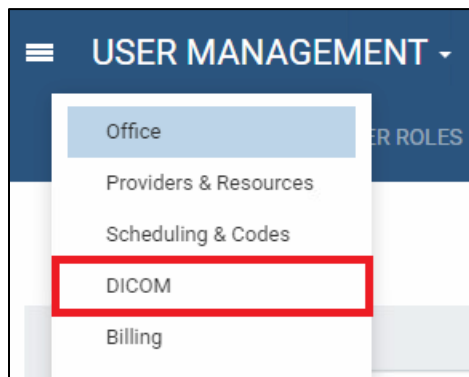
1. In the Symmetry Worklist, click the **hamburger** button in the top-left corner of the screen.



2. Click **Setup**.



3. Select **DICOM** from the drop-down menu.



4. Ensure you are at the AE TITLE section.



5. Validate that the **OPAL1-4 (MIGRATION1-4)** items exists within the list of AE Titles.

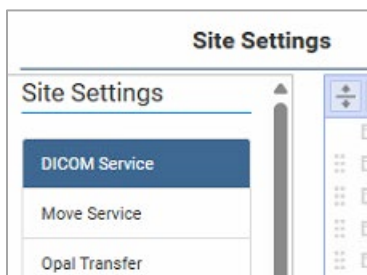
	TITLE	HOST	PORT	DESCRIPTION
	OPAL	localhost	104	OPAL
	OPAL1		104	MIGRATION1
	OPAL2		104	MIGRATION2
	OPAL3		104	MIGRATION3
	OPAL4		104	MIGRATION4

6. If the four AE titles do not exist, refer to the [Configure Symmetry Sync for DICOM Receive](#) section in this document.
7. Click the **RECEIVER RULES** section.
8. Verify that the **MIGRATION** rule exists and is positioned at the top of the list.

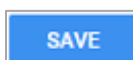
DICOM			
AE TITLE FILE STORE ROUTING RULES AE SCRIPTS RECEIVER RULES MATCHING RULES			
PRIORITY	RULE NAME	AE TITLE	FACILITY
		All	ALL
1	MIGRATION	All	All
2	PACS Only	SYMMETRY	All
3	OPAL RECEIVE	OPAL	All
4	IMPORT	OPALIMPORT	All
5	All Studies	All	All
6	Exa RIS Billing Default	All	All
7	DEFAULT RULE	All	All

9. If the four AE Titles and the Receiver Rule exist, Symmetry Sync is ready to accept images.
- If either option is missing, refer to the [Configure Symmetry Sync for DICOM Receive](#) section in this document.
10. Set parallel threads for the DICOM service:





- a. Update the **no_of_parallel_threads** to 8.
- b. Click **Save** at the bottom.



11. Reboot the PC (the EXA services need to be restarted for the change to take effect).

SITE- DEV- HA SERVICES-

Site Settings

Site Settings

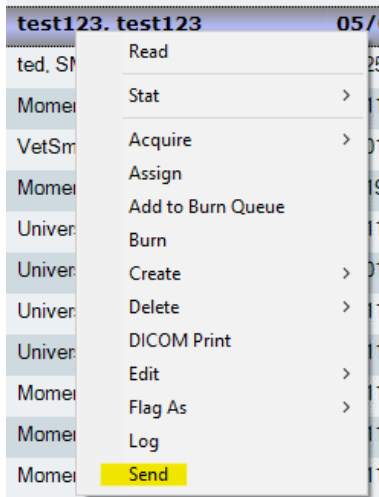
- DICOM Service
- Move Service
- Opal Transfer
- Print Service
- Site
- Mobile RAD
- Viewer Actions
- Viewer Modality
- Transfer Syntaxes
- SOP Classes
- Service Types
- Place of Service
- Themes
- Cultures
- Service Type
- Routes
- Information Source
- Smoking Status
- Vaccines
- Audit Description

```
object {4}
  api {5}
    api_url : http://localhost:8091/api
    referer : EMD PACS SERVICE
    media-type : application/xml
    content-type : Content-Type:application/xml
    http-request : POST
  dicom {16}
    port : 104
    async : 0
    aetitle : EXA_SCP
    ssl_port : 4243
    log_level : VALUE
    api_version : 3
    acse_timeout : 30
    log_filename : dicom_server.log
    dimse_timeout : 1
    logfile_config : dicom_serverlog.cfg
    sr_update_flag : 0
    transferSyntax : VALUE
    server_sleeptime : 50
    process_sleeptime : 30
    generate_sr_report : false
    no_of_parallel_threads : 8
  api_request {3}
    junk_path : G:\\EXA
    retry_interval : 1000
    max_retry_count : 5
  store_response {1}
    reponse_time_interval : 50
```

3 Send Single Test Study in Opal-RAD before Batch Send

Within the Opal-RAD Studylist Client software, we will send a single study to ensure it is sent and received correctly within Symmetry Sync.

1. Right-click the latest study (or a test study if available) and select **Send**.



2. In the Study Send box, do the following:
 - a. Check the **Symmetry-Sync** DICOM destination.
 - b. Click the **Retries** drop-down arrow and select **1**.
 - c. Click **SEND**.



- 3. Opal-RAD:** The study should appear in the **Queues (tab)> Send Queues** list, and eventually to the Transfer Log section when complete.

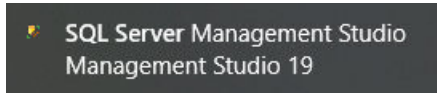
Symmetry Sync: The study should appear in the Symmetry Sync Studylist (ALL STUDIES tab) near the top of the list if received successfully. This process could take some time.

See the Symmetry-user manual for instructions on how to log in and check this status if necessary.

4 Batch DICOM Send data (MS SQL) from Opal-RAD PC

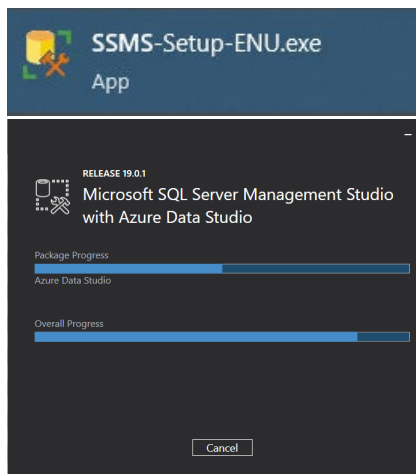
NOTE: Be sure you are on the Opal-RAD PACS PC.

1. Click **Start** and search for **SQL Server**, and open Management Studio (your version may vary).



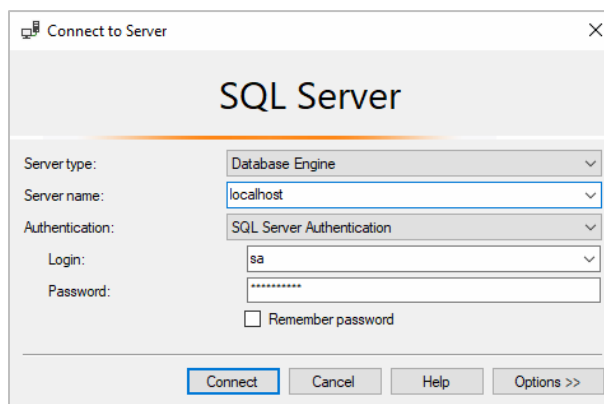
NOTE: If you cannot find SQL Server Management Studio:

- a. Select start and type **ssms** in the search bar.
- b. Click **SSMS-Setup** and follow installation instructions.

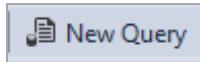


2. Log in to the SQL Server using the following settings. Click **Connect** when finished.

- **Server Name:** localhost
- **Authentication:** SQL Server Auth
- **Login:** sa
- **Password:** 1q2w3e4r5t



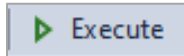
3. Click **New Query** near the top (or use shortcut **Ctrl+N**).



4. Copy and paste the following code into the window:

```
use opalrad
select * from send_destinations
```

5. Click **Execute** (or press **F5**).



6. Near the bottom, notate value in the **sendto_id** and **host_name** columns for the next applicable script.

	sendto_id	public_entry	send_type	remote_ae_title	my_ae_title	host_name	port	description
1	0	1	CSTORE	EXA1	OPAL1	SYMSYNC	104	MIGRATION1
2	1	1	CSTORE	EXA2	OPAL2	test2	104	MIGRATION2
3	2	1	CSTORE			1.1.1.1	104	MIGRATION3
4	3	1	CSTORE			242345	2345	MIGRATION4

7. **MIGRATION PROCESS IN BATCHES:** Validate the amount of data based on earliest study date. We will send one year at a time with each **sendto_id**, which equals four years at a time. This keeps the system sending four times the normal amount of studies while staying stable and gives you the ability to validate the send studies along the way.
8. Click **New Query** again to start a new script, and copy/paste this code into the window:

```
insert into send_queues (user_id, sendto_id, object_type, object_id, queue_created,
priority, attempts, attempts_done, start_time)
select 1, <sendto_id>, 'STUDY', study_id, current_timestamp, 0, 5, 0, 'now' from
studies where Study_datetime > '2000-01-01' and Study_datetime < '2099-12-31'
```

NOTE: Replace **<sendto_id>** from the previous script with the appropriate values without **<>** and execute it.

Example for sendto_id of 0, with the year 2001:

```
insert into send_queues (user_id, sendto_id, object_type, object_id, queue_created,
priority, attempts, attempts_done, start_time)
select 1, 0, 'STUDY', study_id, current_timestamp, 0, 5, 0, 'now' from studies where
Study_datetime > '2001-01-01' and Study_datetime < '2001-12-31'
```

Example for sendto_id of 0, with the year 2002:

```
insert into send_queues (user_id, sendto_id, object_type, object_id, queue_created,
priority, attempts, attempts_done, start_time)
select 1, 0, 'STUDY', study_id, current_timestamp, 0, 5, 0, 'now' from studies where
Study_datetime > '2002-01-01' and Study_datetime < '2002-12-31'
```

Example for sendto_id of 0, with the year 2003:

```
insert into send_queues (user_id, sendto_id, object_type, object_id, queue_created,
priority, attempts, attempts_done, start_time)
select 1, 0, 'STUDY', study_id, current_timestamp, 0, 5, 0, 'now' from studies where
Study_datetime > '2003-01-01' and Study_datetime < '2003-12-31'
```

Example for sendto_id of 0, with the year 2004:

```
insert into send_queues (user_id, sendto_id, object_type, object_id, queue_created,
priority, attempts, attempts_done, start_time)
select 1, 0, 'STUDY', study_id, current_timestamp, 0, 5, 0, 'now' from studies where
Study_datetime > '2004-01-01' and Study_datetime < '2004-12-31'
```

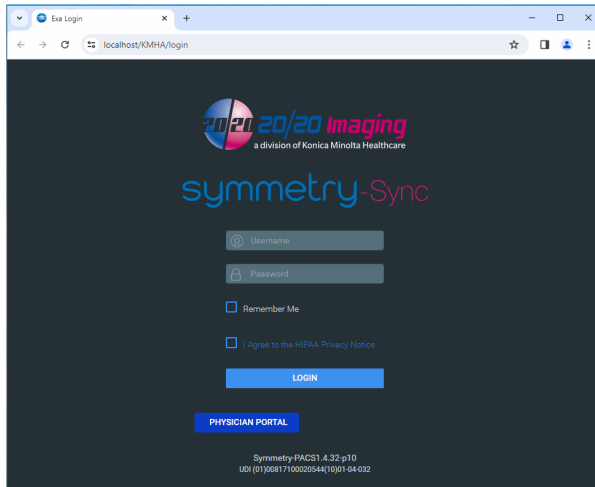
Back in the Opal-RAD Studylist, check the status under the **Queues** tab, and check the **Send Queues** to see pending/waiting studies. The Transfer Log will display studies that were already sent. The **Queues Status** column should read **SENT** for each study if it was successfully completed.

Repeat the steps above until all the years are completed.

5 Symmetry Sync Validation

1. Launch the Symmetry Sync Studylist (shortcut on desktop).

NOTE: If the shortcut is missing, launch Google Chrome and type **localhost** in the URL bar and press **Enter**. The Symmetry PACS webpage should open.



2. Type your credentials for the system using an administrative user account.
3. Check the **I Agree to the HIPAA Privacy Notice** box and click **Login**.
4. Confirm you are on the **ALL STUDIES** tab and check to see what data (based on a single test or batch) is displayed. You should see the data that has been sent from Opal-RAD:

Worklist						
QC		ALL STUDIES				
		STATUS	STUDY DATE	PATIENT	MODALITY	STUDY DESCRIPTION
					All	
		Unread	11/10/2023 11:42 AM EST	Universal 1013 Dr, Retro	DX	3-VIEW FOOT
		Unread	09/26/2023 1:33 AM EDT	Momentum Dr, Ddr	DX	Wrist RT
		Unread	09/26/2023 1:33 AM EDT	Momentum Dr, Ddr	DX	Hip LT

- If you do not see any studies yet (after waiting at least 5–10 minutes), you can click the **QC** (Quality Control) tab for the status, because all studies first pass through QC checks before arriving at the main Studylist.

Worklist

QC

ALL STUDIES

<

RULE

STATUS

STUDY DATE

PATIENT

MODALITY

STUDY DESCRIPTION

All

+

PACS Only

Completed

02/15/2024 10:40 AM EST

Test123, Test123

DX

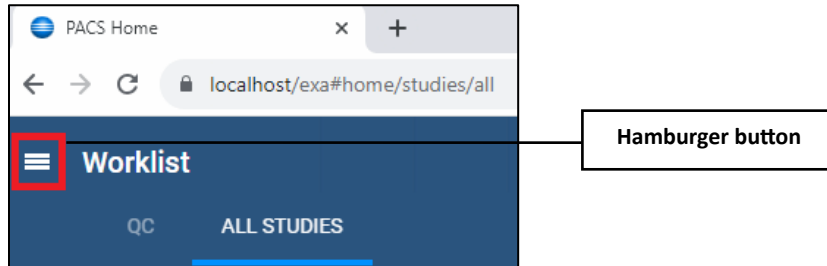
X-Ray Exam

- If you see an error under STATUS, you may need to complete the steps in the [Configure Symmetry Sync for DICOM Receive](#) section of this document. If this fails, call 20/20 Imaging support for further assistance.

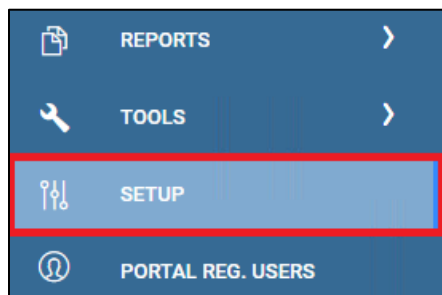
6 (Optional, if required) Configure Symmetry Sync for DICOM Receive

NOTE: Follow these steps **only** if specifically required (see previous section). They are usually unnecessary when Symmetry Sync is properly configured. Some versions of the system will have differing configurations, so it's a good idea to double check all of the following settings:

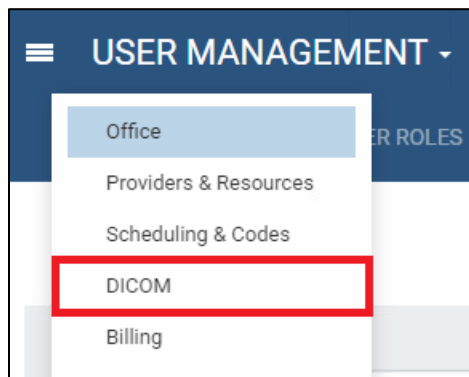
1. In the Symmetry Worklist, click the **hamburger** button in the top-left corner of the screen.



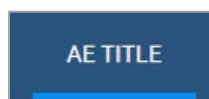
2. Click **Setup**.



3. Select **DICOM** from the drop-down menu.



4. Ensure you are at the AE TITLE section.



5. Check the image below. If there are not 4 AE Titles, follow the steps below to add.

6. Click **ADD**.

7. Configure the following values (4 instances):

- **AE Type:** Receive
- **AE Title (Remote):** OPAL1 (add 4 instances, OPAL2, OPAL3, OPAL4)
- **Host Name:** localhost
- **Description:** MIGRATION1 (add 4 instances, MIGRATION2, MIGRATION3, MIGRATION4)
- **Retries:** 2
- **Max Concurrent:** 4
- **Receive Facility:** Konica Minolta Healthcare (or default/current facility name)
- **Issuer Type:** None
- **AE Flag:** DICOM
- **File Store:** Exa Server
- **Port:** 104
- **Transfer Syntax (Receive):** JPEG 2000 Image Compression (Lossless Only)

The screenshot shows the 'DICOM' configuration interface with the 'AE TITLE' tab selected. The form contains the following fields and values:

- AE Type:** A dropdown menu with 'RECEIVE' selected.
- AE Title (Remote):** Text input field containing 'OPAL1'.
- Host Name:** Text input field containing 'Opal's IP'.
- Description:** Text input field containing 'MIGRATION1'.
- Retries:** Text input field containing '2'.
- Max Concurrent:** Text input field containing '4'.
- Receive Facility:** Text input field containing 'Konica Minolta Healthcare'.
- AE Flag:** A dropdown menu with 'DICOM' selected.
- Institution:** Text input field (empty).
- File Store:** A dropdown menu with 'Exa Server' selected.
- Port:** Text input field containing '104'.
- Transfer Syntax (Send):** A dropdown menu with 'Select' selected.
- Transfer Syntax (Receive):** A dropdown menu with 'JPEG 2000 Image Compression (Lossless Only)' selected.
- Vehicle:** Text input field (empty).
- SDE Modality:** A checkbox that is unchecked.
- Include Approved Report:** A checkbox that is unchecked.

At the top right of the interface, there are buttons for 'SAVE', 'PING', 'DICOM ECHO', 'CLEAR', and 'BACK'. The 'DICOM ECHO' button is highlighted with a red border in the original image.

8. Click **DICOM ECHO** and verify the **Connected** message is displayed.

A row of five buttons: 'SAVE', 'PING', 'DICOM ECHO', and 'BACK'. The 'DICOM ECHO' button is highlighted with a red border.

DICOM Echo

dicomEchoCommand
H:\viztek\EXA\bin\OpalDicomEcho localhost 104 SYMMETRY EXA_SCP

result
Address : localhost
Port : 104
Called AeTitle: SYMMETRY
Calling AeTitle: EXA_SCP

Attempting to connect...
Aug17 12:05:29 'DICOM App Context Name' is not an SOP Class UID
Connected
Write EchoRq
Read Response

Association : 1
CalledAeTitle: SYMMETRY

9. Click **Save**.

SAVE PING DICOM ECHO CLEAR BACK

10. Select **DICOM> Receiver Rules**.

DICOM

AE TITLE FILE STORE ROUTING RULES AE SCRIPTS **RECEIVER RULES**

11. Check the following image. If the **MIGRATION** rule is missing, complete the following steps to add:

DICOM

AE TITLE FILE STORE ROUTING RULES AE SCRIPTS **RECEIVER RULES** MATCHING RULES

PRIORITY	RULE NAME	AE TITLE	FACILITY
1	MIGRATION	All	All
2	PACS Only	SYMMETRY	All

12. Click **Add**.

ADD RELOAD

13. Enter the following information:

- **Rule Name:** MIGRATION
- **AE Title:** All

- **Facility:** All
- **Modality:** All
- **Status:** Read
- **Interval (Sec.):** 20
- **Receiver Rule:** PACS Only

Rule Information and Filter		Applied Rules
Rule Name *	MIGRATION ☐ Inactive	• Reconciliation Mode: PACS Only Site • Select Study description from DICOM • Patient • Account No./DICOM Patient ID • Move Anyway (Even in Exception) • Move to Live on No-Match • Study • Study UID • Move to Live on No-Match
AE Title	All ▼	
Facility	All ▼	
Modality	All ▼	
Institution		
Status	Read ▼	
Interval (Sec.) *	20	
Trigger Routing Rules	☐	
Issuer Of Alternate Account Number	☐	
Receiver Rule	PACS ONLY PACS/RIS PACS/DMWL MIGRATION	

14. Click **Advanced**.

SAVE	ADVANCED	BACK
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15. Check the following boxes:

- **Account No./DICOM Patient ID**
- **Study UID**
- **Move Anyway (Even in Exception)**
- **Move to Live on No-Match**
- **Move to Live on No-Match**

Patient Demographics Validation *	Study Matching (RIS Orders) *
☒ Account No./DICOM Patient ID ☐ Issuer Of Alternate Account Number	☒ Study UID
☐ First Name	☐ Accession No.
☐ Last Name	☐ DICOM Study ID
☐ Middle Name	☐ Study Date
☐ Sex	☐ Modality
☐ Date of Birth	☐ Orders from Past 0 Days and 0 Days in Future
☒ Move Anyway (Even in Exception)	☒ Move to Live on No-Match
☒ Move to Live on No-Match	

16. Click **Save**.

SAVE	CLEAR	ADVANCED	BACK
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17. Click the **Up Arrow** in the Receiver Rules page to move the **PACS ONLY** rule to the Priority 1 position.