RAYSTATION 2024B

IHE-RO Integration Statement

Safety notices

This user documentation contains WARNINGS concerning the safe use of the product. These must be followed.



WARNING!

The general warning sign informs you of a risk for bodily harm. In most cases the risk is related to mistreatment of the patient.

Note:

The note gives additional information concerning a specific topic, for example, things to consider when performing a certain step in an instruction.

Copyright

This document contains proprietary information that is protected by copyright. No part of this document may be photocopied, reproduced or translated to another language without prior written consent of RaySearch Laboratories AB (publ).

All Rights Reserved. @ 2025, RaySearch Laboratories AB (publ).

Printed material

Hard copies of Instructions for Use and Release Notes related documents are available upon request.

Trademarks

RayAdaptive, RayAnalytics, RayBiology, RayCare, RayCloud, RayCommand, RayData, RayIntelligence, RayMachine, RayOptimizer, RayPACS, RayPlan, RaySearch, RaySearch Laboratories, RayStation, RayStore, RayTreat, RayWorld and the RaySearch Laboratories logotype are trademarks of RaySearch Laboratories AB (publ)*.

Third-party trademarks as used herein are the property of their respective owners, which are not affiliated with RaySearch Laboratories AB [publ].

RaySearch Laboratories AB (publ) including its subsidiaries is hereafter referred to as RaySearch.



^{*} Subject to registration in some markets.

INTEGRATION STATEMENT

1.1 INTRODUCTION

This IHE Integration Statement is prepared and published to describe the conformance of RayStation with the IHE-RO Technical Framework. It identifies specific IHE-RO capabilities that are supported in terms of actors and integration profiles described in the technical frameworks of each domain.

Users familiar with these concepts can use Integration Statements to determine the integration of RayStation with complementary systems and what clinical and operational benefits such integration might provide. This Integration Statements is intended to be used in conjunction with the RayStation DICOM Conformance Statement.

1.2 PRODUCT VERSION

This Integration Statement is valid for RayStation 2024B.

1.3 ABOUT THE TESTING PROCESS

IHE provides a process for vendors to test their implementations of IHE actors and integration profiles. The IHE testing process, culminating in a multi-party interactive testing event called the Connect-a-thon, provides vendors with valuable feedback and provides a baseline indication of the conformance of their implementations. The process is not intended to independently evaluate, or ensure, product compliance. In publishing the results of the Connect-a-thon and facilitating access to vendors' IHE Integration Statements, IHE and its sponsoring organizations are in no way attesting to the accuracy or validity of any vendor's IHE Integration Statements or any other claims by vendors regarding their products.

RaySearch Laboratories has done further validation beyond the IHE-RO Connect-a-thon to ensure that RayStation conforms to applicable standards. This Integration Statement shall not be used a guarantee that RayStation will work in any environment or with any external system.

1.4 REFERENCES

Reference	Resource
DICOM	https://www.dicomstandard.org/
IHE	https://www.ihe.net/
IHE-RO	https://www.ihe.net/ihe_domains/radiation_oncology/

1.5 **DEFINITIONS**

Term	Meaning
CE	CE marking is a certification mark that indicates conformity with health, safety, and environmental protection standards for products sold within the European Economic Area (EEA)
DICOM	Digital Imaging and Communications in Medicine
EEC	European Economic Community
IHE	Integrating the Healthcare Enterprise
IHE-RO	Integrating the Healthcare Enterprise Radiation Oncology
BRTO-II	Basic RT Object Interoperability-II (IHE-RO Profile)
DRRO	Deformable Registration for Radiation Oncology (IHE-RO Profile)
MMRO-III	Multi-Modality Registration in Radiation Oncology-III (IHE-RO Profile)
TPPC	Treatment Planning — Plan Content (IHE-RO Profile)

1.6 INTEGRATION STATEMENT

RaySearch Laboratories RayStation 20248 This product implements all transactions required in the IHE Technical Framework to support the IHE Integration Profiles, Actors and Options listed below: Integration Profiles Implemented BRT0-II Contourer Contourer Resample CT, Feet First, Structure Set Retrieval Dose Displayer Pegistered Contourer Registered Contourer Registered Display Registered Pose Display Registered Pose Display Registered Pose Display Registered Registrator Deformable Registrator Deformable Registrator Deformable Registrator Deformable Registrator Deformer Contour Deformer Dose Deformer Arc Beam Producer MILC Fixed Aperture Arc Beam Producer MILC Variable Aperture Arc Beam Producer Virtual Wedge Beam Producer Static Electron Beam Producer Static Electron Beam Producer Static Electron Beam Producer Static Beam Producer Photon Applicator Arc Beam Producer Basic Static Beam Consumer Arc Beam Consumer Arc Beam Consumer Arc Beam Consumer	IHE-Integration Statement	Date	9 January 2025	
This product implements all transactions required in the IHE Technical Framework to support the IHE Integration Profiles, Actors and Options listed below: Integration Profiles Actors Implemented Options Implemented	Vendor	Product Name	Version	
Integration Profiles Integration Profiles Implemented Potions Implemented Implemented Profiles Implemented Imple	RaySearch Laboratories	aySearch Laboratories RayStation		
Implemented Contourer Resample CT, Feet First, Structure Set Retrieval Dose Displayer - MMRO-III Registrator REG Retrieval Registered Contourer - Registered Display - Registered Dose Display - Registered Dose Display - Deformable Registrator - Deformable Displayer - Image Deformer - Contour Deformer - TPPC Basic Static Beam Producer - Basic Static Beam Producer Bolus Beam Modifier Arc Beam Producer - MLC Variable Aperture Arc Beam Producer - Producer - Hard Wedge Beam Producer - Virtual Wedge Beam Producer - Static Electron Beam Producer - Step & Shoot Beam Producer - Sliding Window Beam Producer - IMAT/VMAT Beam Producer - Photon Applicator Arc Beam Producer - Photon Applicator Arc Beam Producer - Basic Static Beam Consumer - Basic Static MLC Beam Consumer -	·	•	amework to support the IHE	
Dose Displayer		Actors Implemented	Options Implemented	
MMRO-III Registered Contourer Registered Display Registered Dose Display Registered Dose Display DEFORMATION TO DEFORMATION	BRTO-II	Contourer	Feet First,	
Registered Contourer Registered Display Registered Dose Display Deformable Registrator Deformable Displayer Image Deformer Dose Deformer Contour Deformer		Dose Displayer	-	
Registered Display Registered Dose Display Deformable Registrator Deformable Displayer Image Deformer Image D	MMRO-III	Registrator	REG Retrieval	
Registered Dose Display Deformable Registrator Deformable Registrator Deformable Displayer Image Deformer Dose Deformer Contour Deformer Contour Deformer Basic Static Beam Producer Basic Static MLC Beam Producer Basic Static MLC Beam Producer MLC Fixed Aperture Arc Beam Producer MLC Variable Aperture Arc Beam Producer Hard Wedge Beam Producer Virtual Wedge Beam Producer Static Electron Beam Producer Static Electron Beam Producer Step & Shoot Beam Producer IMAT/VMAT Beam Producer Photon Applicator Beam Producer Photon Applicator Arc Beam Producer Basic Static Beam Consumer Basic Static Beam Consumer		Registered Contourer	-	
DRRO Deformable Registrator Deformable Displayer Image Deformer Dose Deformer Contour Deformer Contour Deformer Basic Static Beam Producer Arc Beam Producer Arc Beam Producer MLC Fixed Aperture Arc Beam Producer MLC Variable Aperture Arc Beam Producer Hard Wedge Beam Producer Wirtual Wedge Beam Producer Motorized Wedge Beam Producer Static Electron Beam Producer Static Electron Beam Producer Step & Shoot Beam Producer Sliding Window Beam Producer IMAT/VMAT Beam Producer Photon Applicator Beam Producer Photon Applicator Arc Beam Producer Basic Static Beam Consumer Basic Static Beam Consumer Basic Static MLC Beam Consumer		Registered Display	-	
Deformable Displayer Image Deformer Dose Deformer Contour Deformer Contour Deformer		Registered Dose Display	-	
Image Deformer Dose Deformer Contour Deformer Ensic Static Beam Producer Basic Static MLC Beam Producer Arc Beam Producer MLC Fixed Aperture Arc Beam Producer MLC Variable Aperture Arc Beam Producer Hard Wedge Beam Producer Virtual Wedge Beam Producer Static Electron Beam Producer Step & Shoot Beam Producer IMAT/VMAT Beam Producer Photon Applicator Beam Producer Photon Applicator Arc Beam Producer Basic Static MLC Beam Consumer Basic Static MLC Beam Consumer	DRRO	Deformable Registrator	-	
Dose Deformer Contour Deformer Contour Deformer Basic Static Beam Producer Basic Static MLC Beam Producer Arc Beam Producer Arc Beam Producer MLC Fixed Aperture Arc Beam Producer MLC Variable Aperture Arc Beam Producer Hard Wedge Beam Producer Virtual Wedge Beam Producer Motorized Wedge Beam Producer Static Electron Beam Producer Step & Shoot Beam Producer Sliding Window Beam Producer IMAT/VMAT Beam Producer Photon Applicator Beam Producer Photon Applicator Arc Beam Producer Basic Static Beam Consumer Basic Static Beam Consumer -		Deformable Displayer	-	
TPPC Basic Static Beam Producer Basic Static MLC Beam Producer Arc Beam Producer Arc Beam Producer MLC Fixed Aperture Arc Beam Producer MLC Variable Aperture Arc Beam Producer Hard Wedge Beam Producer Virtual Wedge Beam Producer Static Electron Beam Producer Static Electron Beam Producer Step & Shoot Beam Producer Sliding Window Beam Producer IMAT/VMAT Beam Producer Photon Applicator Beam Producer Photon Applicator Arc Beam Producer Basic Static Beam Consumer Basic Static Beam Consumer		Image Deformer	-	
TPPC Basic Static Beam Producer Basic Static MLC Beam Producer Arc Beam Producer MLC Fixed Aperture Arc Beam Producer MLC Variable Aperture Arc Beam Producer Hard Wedge Beam Producer Virtual Wedge Beam Producer Motorized Wedge Beam Producer Static Electron Beam Producer Step & Shoot Beam Producer Sliding Window Beam Producer IMAT/VMAT Beam Producer Photon Applicator Beam Producer Photon Applicator Arc Beam Producer Basic Static Beam Consumer Basic Static Beam Consumer		Dose Deformer	-	
Basic Static MLC Beam Producer Arc Beam Producer MLC Fixed Aperture Arc Beam Producer MLC Variable Aperture Arc Beam Producer Hard Wedge Beam Producer Virtual Wedge Beam Producer Motorized Wedge Beam Producer Static Electron Beam Producer Step & Shoot Beam Producer Sliding Window Beam Producer IMAT/VMAT Beam Producer Photon Applicator Beam Producer Photon Applicator Arc Beam Producer Basic Static Beam Consumer Basic Static MLC Beam Consumer		Contour Deformer	-	
Arc Beam Producer MLC Fixed Aperture Arc Beam Producer MLC Variable Aperture Arc Beam Producer Hard Wedge Beam Producer Virtual Wedge Beam Producer Motorized Wedge Beam Producer Static Electron Beam Producer Step & Shoot Beam Producer Sliding Window Beam Producer IMAT/VMAT Beam Producer Photon Applicator Beam Producer Photon Applicator Arc Beam Producer Basic Static Beam Consumer Basic Static MLC Beam Consumer	TPPC	Basic Static Beam Producer	-	
MLC Fixed Aperture Arc Beam Producer MLC Variable Aperture Arc Beam Producer Hard Wedge Beam Producer Virtual Wedge Beam Producer Motorized Wedge Beam Producer Static Electron Beam Producer Step & Shoot Beam Producer Sliding Window Beam Producer IMAT/VMAT Beam Producer Photon Applicator Beam Producer Photon Applicator Arc Beam Producer Basic Static Beam Consumer Basic Static MLC Beam Consumer		Basic Static MLC Beam Producer	Bolus Beam Modifier	
Producer MLC Variable Aperture Arc Beam Producer Hard Wedge Beam Producer Virtual Wedge Beam Producer Motorized Wedge Beam Producer Static Electron Beam Producer Step & Shoot Beam Producer Sliding Window Beam Producer IMAT/VMAT Beam Producer Photon Applicator Beam Producer Photon Applicator Arc Beam Producer Basic Static Beam Consumer Basic Static MLC Beam Consumer		Arc Beam Producer	-	
Producer Hard Wedge Beam Producer Virtual Wedge Beam Producer Motorized Wedge Beam Producer Static Electron Beam Producer Step & Shoot Beam Producer Sliding Window Beam Producer IMAT/VMAT Beam Producer Photon Applicator Beam Producer Photon Applicator Arc Beam Producer Basic Static Beam Consumer Basic Static MLC Beam Consumer		•	-	
Virtual Wedge Beam Producer Motorized Wedge Beam Producer Static Electron Beam Producer Step & Shoot Beam Producer Sliding Window Beam Producer IMAT/VMAT Beam Producer Photon Applicator Beam Producer Photon Applicator Arc Beam Producer Basic Static Beam Consumer Basic Static MLC Beam Consumer		· ·	-	
Motorized Wedge Beam Producer Static Electron Beam Producer Step & Shoot Beam Producer Sliding Window Beam Producer IMAT/VMAT Beam Producer Photon Applicator Beam Producer Photon Applicator Arc Beam Producer Basic Static Beam Consumer Basic Static MLC Beam Consumer		Hard Wedge Beam Producer	-	
Static Electron Beam Producer Step & Shoot Beam Producer Sliding Window Beam Producer IMAT/VMAT Beam Producer Photon Applicator Beam Producer Photon Applicator Arc Beam Producer Basic Static Beam Consumer Basic Static MLC Beam Consumer		Virtual Wedge Beam Producer	-	
Step & Shoot Beam Producer Sliding Window Beam Producer IMAT/VMAT Beam Producer Photon Applicator Beam Producer Photon Applicator Arc Beam Producer Basic Static Beam Consumer Basic Static MLC Beam Consumer		Motorized Wedge Beam Producer	-	
Sliding Window Beam Producer IMAT/VMAT Beam Producer Photon Applicator Beam Producer Photon Applicator Arc Beam Producer Basic Static Beam Consumer Basic Static MLC Beam Consumer		Static Electron Beam Producer	-	
IMAT/VMAT Beam Producer - Photon Applicator Beam Producer - Photon Applicator Arc Beam - Producer Basic Static Beam Consumer - Basic Static MLC Beam Consumer -		Step & Shoot Beam Producer	-	
Photon Applicator Beam Producer Photon Applicator Arc Beam Producer Basic Static Beam Consumer Basic Static MLC Beam Consumer -		Sliding Window Beam Producer	-	
Photon Applicator Arc Beam Producer Basic Static Beam Consumer Basic Static MLC Beam Consumer -		IMAT/VMAT Beam Producer	-	
Producer Basic Static Beam Consumer - Basic Static MLC Beam Consumer -		Photon Applicator Beam Producer	-	
Basic Static MLC Beam Consumer -		• • • • • • • • • • • • • • • • • • • •	-	
		Basic Static Beam Consumer	-	
Arc Beam Consumer -		Basic Static MLC Beam Consumer	-	
		Arc Beam Consumer	-	

	MLC Fixed Aperture Arc Beam Consumer	-				
	MLC Variable Aperture Arc Beam Consumer	-				
	Hard Wedge Beam Consumer	-				
	Virtual Wedge Beam Consumer	-				
	Motorized Wedge Beam Consumer	-				
	Static Electron Beam Consumer					
	Step & Shoot Beam Consumer	-				
	Sliding Window Beam Consumer	-				
	IMAT/VMAT Beam Consumer	-				
	Photon Applicator Beam Consumer	-				
	Photon Application Arc Beam Consumer	-				
Links to Standards Conformance Statements for the Implementation						
DICOM IHE	https://www.raysearchlabs.com/product-configurations/					
Links to general information on IHE						
In North America: www.ihe.het	In Europe: www.ihe-europe.org	In Japan: www.jira-net.or.jp/ihe-j				



CONTACT INFORMATION



RaySearch Laboratories AB (publ) Eugeniavägen 18C SE-113 68 Stockholm Sweden

Contact details head office

P.O. Box 45169

SE-104 30 Stockholm, Swede Phone: +46 8 510 530 00 Fax: +46 8 510 530 30 info@raysearchlabs.com www.rausearchlabs.com

RaySearch Americas

Phone: +1 347 477 1935

RaySearch China

Phone: +86 137 0111 5932

RaySearch India

E-mail: manish.jaiswal@raysearchlabs.com

RaySearch Singapore

Phone: +65 8181 6082

RaySearch Australia

Phone: +61 411 534 316

RaySearch France

Phone: +33 (N)1 76 53 72 N2

RaySearch Japan

Phone: +81 (0)3 44 05 69 02

RaySearch UK

Phone: +44 (0)2039 076793

RaySearch Belgium

Phone: +32 475 36 80 07

RaySearch Germany

Phone +49 (N)172 766N837

RaySearch Korea

Phone: +82 01 9492 6432

