Oncentra® v4.0

IHE Integration Statement
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Unless otherwise stated the service dispatch call number is the main telephone number.

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**Your Distributor / Agent**
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2. **Integration Statement**

2
1. Introduction

1.1 General
This document specifies the Integrating the Healthcare Enterprise (IHE) conformance of the Oncentra radiotherapy treatment planning system.

1.2 Intended Audience
This document is intended for system developers, system integrators, and users or potential users of the Oncentra system (or their agents).

It is assumed that the reader of this document is familiar with IHE.

1.3 Important Notes
The document itself does not guarantee successful IHE communication between Oncentra and non-Oncentra applications that claim conformance to IHE. However, it is the user’s (or the user’s agent) responsibility to address at least the following issues:

1.3.1 Interoperability
Integration in terms of interoperability of modalities claiming conformance to IHE goes beyond the IHE Integration Statement.

When intending to connect to non-Oncentra applications, users or their agents are encouraged to carefully examine the IHE Integration Statements of the other application, to ensure that both applications offer support for the same actors.

1.3.2 Validation
IHE compliance of Oncentra has been carefully tested to assure compliance of the system with this IHE Integration Statement. However, connectivity and proper functionality with other vendors’ products has to be verified prior to clinical use of the applications.

It is the responsibility of the users (or their agents) to verify IHE connectivity within the environment in which the Oncentra applications shall be used. In this respect Nucletron will assist the user as far as possible.

1.3.3 Evolution of the IHE Technical Framework
It is expected that the IHE Technical Framework will be further developed to meet future requirements. Nucletron is actively contributing to these developments. Therefore, it is natural that the Nucletron products will be adapted due to changes in the IHE Technical Framework.

The user is encouraged to make sure that any product from another vendor is also continuously adapted to IHE revisions. Ignoring this will increase the risk of losing connectivity and/or interoperability.
# 2. Integration Statement

<table>
<thead>
<tr>
<th>Integration Profiles Implemented</th>
<th>Actors Implemented</th>
<th>Options Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT Objects Integration Profile*</td>
<td>Contourer</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Geometric planner</td>
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</tr>
<tr>
<td></td>
<td>Dosimetric planner</td>
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</tr>
<tr>
<td></td>
<td>Dose Displayer</td>
<td>n/a</td>
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<td>Multi Modality Registration Profile*</td>
<td>Registrar</td>
<td>n/a</td>
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<tr>
<td></td>
<td>Registered Contourer</td>
<td>n/a</td>
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<tr>
<td></td>
<td>Registered Display</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Registered Dose Display</td>
<td>n/a</td>
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<tr>
<td>Advanced RT Objects Interoperability Profile**</td>
<td>Basic Static Beam Producer</td>
<td>Bolus Beam Modifier Storage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Block Beam Modifier Storage</td>
</tr>
<tr>
<td></td>
<td>Basic Static Beam Consumer</td>
<td>Bolus Beam Modifier Retrieval</td>
</tr>
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<td>Block Beam Modifier Retrieval</td>
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<tr>
<td></td>
<td>Motorized Wedge Beam Producer</td>
<td>Bolus Beam Modifier Storage</td>
</tr>
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<td>Hard Wedge Beam Producer</td>
<td>Bolus Beam Modifier Storage</td>
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<td>Block Beam Modifier Storage</td>
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<td>Block Beam Modifier Retrieval</td>
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<tr>
<td></td>
<td>Virtual Wedge Beam Producer</td>
<td>Bolus Beam Modifier Storage</td>
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<tr>
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<td>Virtual Wedge Beam Consumer</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Block Beam Modifier Retrieval</td>
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</table>

This product implements all transactions required in the IHE Technical Framework to support the IHE Integration profiles, actors and options listed below:
<table>
<thead>
<tr>
<th>Arc Beam Producer</th>
<th>Bolus Beam Modifier Storage</th>
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</thead>
<tbody>
<tr>
<td>Arc Beam Consumer</td>
<td>Bolus Beam Modifier Retrieval</td>
</tr>
<tr>
<td>Conformal Arc Beam Consumer</td>
<td>Bolus Beam Modifier Storage</td>
</tr>
<tr>
<td>Sliding Window Beam Consumer</td>
<td>Bolus Beam Modifier Retrieval</td>
</tr>
<tr>
<td>Step &amp; Shoot Beam Producer</td>
<td>Bolus Beam Modifier Storage</td>
</tr>
<tr>
<td>Block Beam Modifier Storage</td>
<td></td>
</tr>
<tr>
<td>Hard Wedge Beam Modifier Storage</td>
<td></td>
</tr>
<tr>
<td>Step &amp; Shoot Beam Consumer</td>
<td>Bolus Beam Modifier Retrieval</td>
</tr>
<tr>
<td>Block Beam Modifier Retrieval</td>
<td></td>
</tr>
<tr>
<td>Hard Wedge Beam Modifier Retrieval</td>
<td></td>
</tr>
<tr>
<td>Static Electron Beam Producer</td>
<td>Bolus Beam Modifier Storage</td>
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<td>Block Beam Modifier Storage</td>
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</tr>
<tr>
<td>Static Electron Beam Consumer</td>
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</tr>
<tr>
<td>Block Beam Modifier Retrieval</td>
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</tr>
<tr>
<td>IMAT/VMAT Beam Producer</td>
<td>Bolus Beam Modifier Storage</td>
</tr>
<tr>
<td>IMAT/VMAT Beam Consumer</td>
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</tr>
<tr>
<td>Basic Static MLC Beam Producer</td>
<td>Bolus Beam Modifier Storage</td>
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<td>Basic Static MLC Beam Consumer</td>
<td>Bolus Beam Modifier Retrieval</td>
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<tr>
<td>MLC Arc Beam Producer</td>
<td>Bolus Beam Modifier Storage</td>
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<td>MLC Arc Beam Consumer</td>
<td>Bolus Beam Modifier Retrieval</td>
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</table>

Internet address for Nucletron’s IHE information: [http://www.nucletron.com/Oncentra/Pages/OncentraandIHEIntegrationstatement.aspx](http://www.nucletron.com/Oncentra/Pages/OncentraandIHEIntegrationstatement.aspx)

**Links to Standards Conformance Statements for the Implementation**

<table>
<thead>
<tr>
<th>HL7</th>
<th>n/a</th>
</tr>
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</table>

**Links to general information on IHE**

<table>
<thead>
<tr>
<th>In North America:</th>
<th>In Europe:</th>
<th>In Japan:</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.rsna.org/IHE">www.rsna.org/IHE</a></td>
<td><a href="http://www.ihe-europe.org">www.ihe-europe.org</a></td>
<td><a href="http://www.jira-net.or.jp/ihe-j">www.jira-net.or.jp/ihe-j</a></td>
</tr>
</tbody>
</table>

* The actors in this profile are unchanged for Oncentra v4.0 and were tested successfully with Oncentra v3.3 in the 2009 IHE-RO Connectathon.

** This profile was tested again in the 2010 IHE-RO Connectathon with Oncentra v4.0. However, not all actors had sufficient partners to officially pass the profile in the Connectathon. Nucletron B.V. verified that all the listed actors comply with this profile.