IHE® EUROPE | EXPERIENCE DAY | 13 SEPTEMBER 2022

IHE SHARAZONE

New Dimension in Interoperability Testing

IHE CONNECTATHON 2022 BUILDING THE BRIDGE MONTREUX+ATLANTA SEPTEMBER 12-16

www.ihe-europe.net/IHE_SHARAZONE

Background

It is critical for products **creating** standardized objects to have these objects **tested** with a broad number of **consuming** products in an easy to access environment with most other deployed vendors' products.

Objective

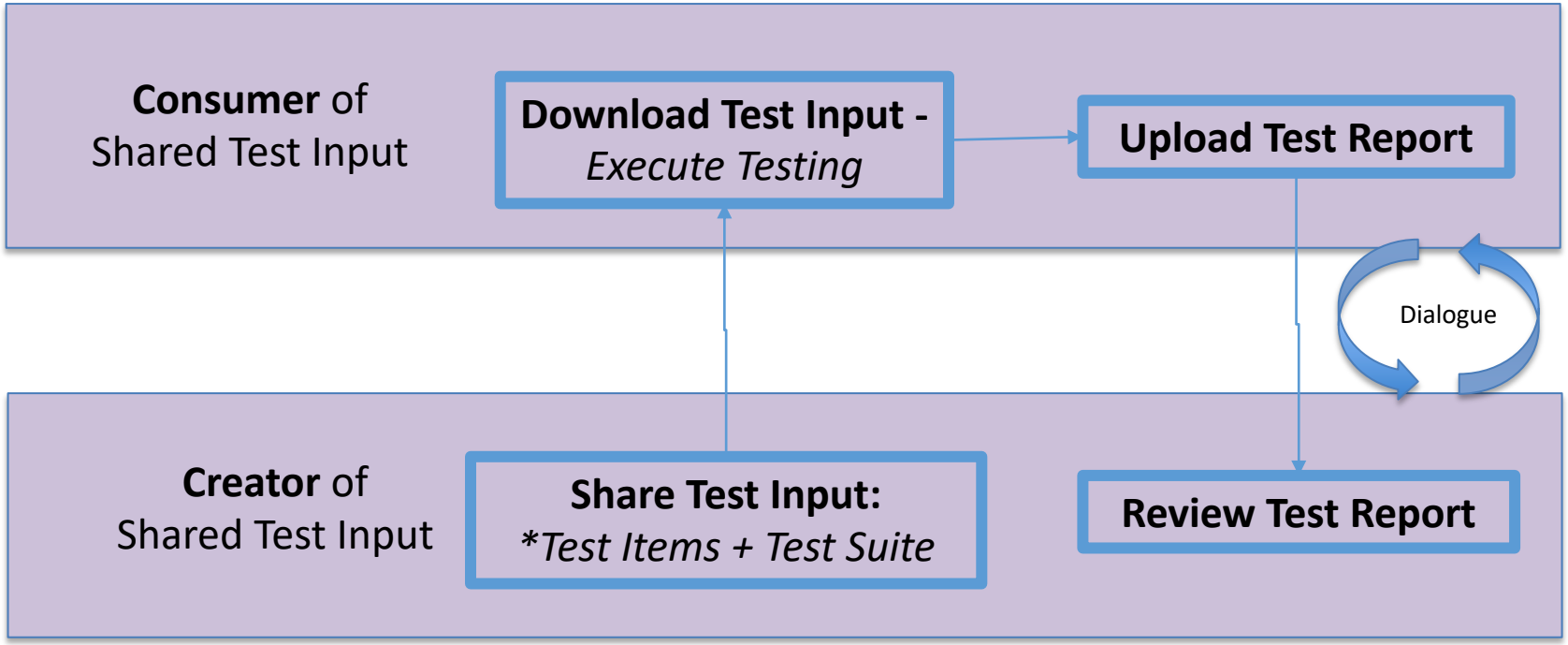
IHE SHARAZONE initially focuses on the sharing & testing of **DICOM objects**, however the resulting framework and service may be extended to other objects, such as CDA & FHIR Documents in the future.

IHE SHARAZONE - Benefits

IHE SHARAZONE, safe, neutral testing environment:

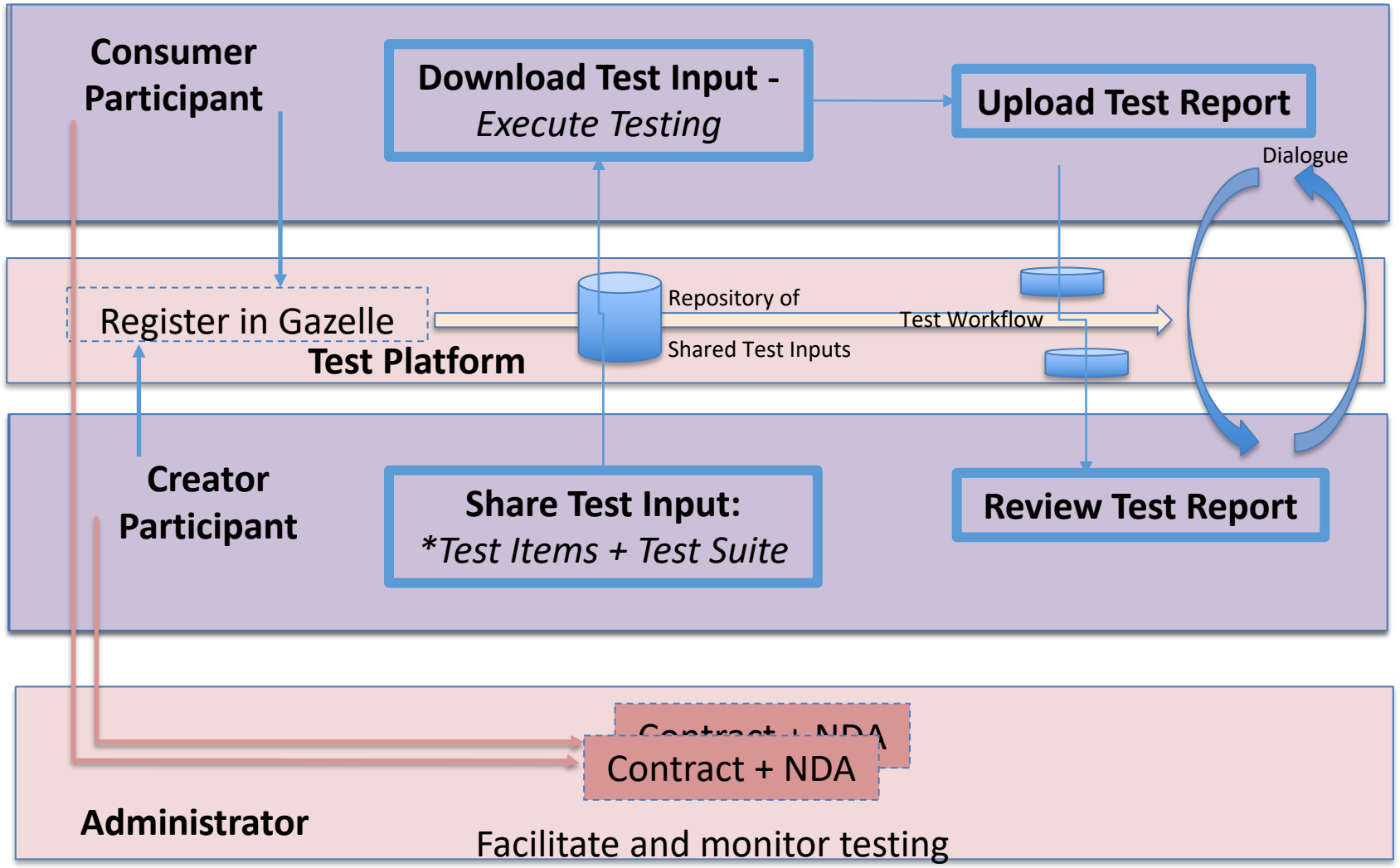
- Source Product submits DICOM objects and test suite. Available **to all participants**
- **Continuous interoperability test** offering (24/7): Consumer Products respond with a test report to Source when they chose
- **Products are commercial** or open source; released or planned to be released
- Does not replace but complements the IHE Connectathon™

Process Overview (1)



*Test Items = DICOM Datasets
Test Suite = Intended testing for the Test Items
*Test Report = Test Suite with test results recorded

Process Overview (2)



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Sample Test Report

Template available in Gazelle

During Testing, dialogue with Shared Test Input Creator may occur in Gazelle or Rocket.Chat

GUIDELINES

This document's purpose is to have a better understanding of how GSPS is handled by different PACS and viewers

Two DICOM images have been shared (one SCPT and one GSPS). The goal is to see how display the GSPS object.

GSPS overlays are displayed over a simulated image as follows:

Expected Results

Test Input

File	Description
gsps.dcm	Sample for test
image.dcm	Secondary Capture Phantom

Patient "Bone Multi 02"

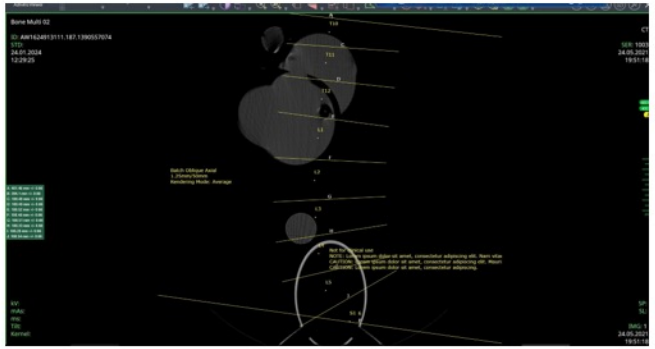
Test Script

Step	Action	Expected Result	Actual Result	Pass/Fail
Import				
#1	Import Test Items into Consumer application	Study, Series Image hierarchy are imported as described in the Test Input section above	2 series imported	Pass
Image display				
#2	Precondition: Test Items are loaded into the Consumer display	GSPS overlays displayed as below		Pass

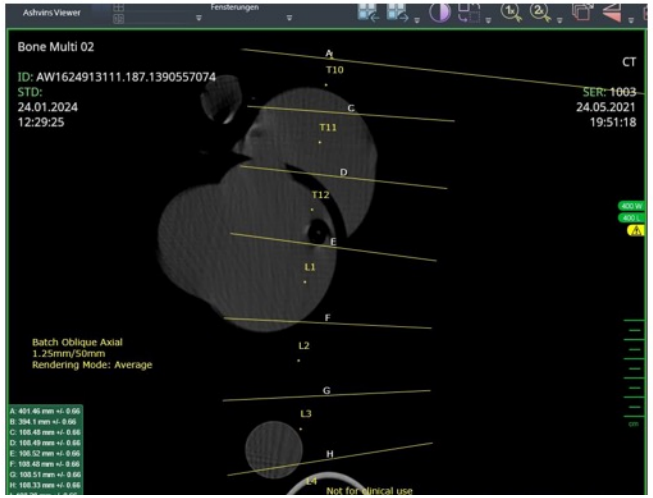
Step	Action	Expected Result	Actual Result	Pass/Fail
#3	Display image and overlays in a variety of viewport sizes, by modifying layouts such as: 1 on 1 2 on 1 4 on 1 We would like to see any text wrap or truncation effects. Please provide screen captures of each.	GSPS overlays displayed as below	See screenshots attached below. Please note that the images were displayed on a test machine where I dial in remotely.	Pass

Overall Comments (to be provided by the Consumer)

1on1



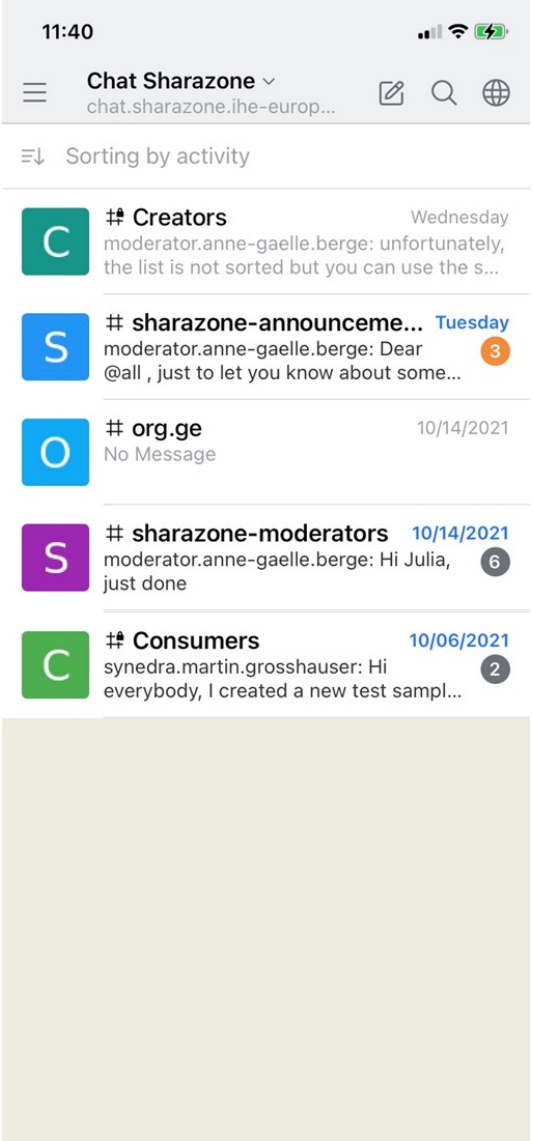
2on1



Rocket.Chat Messenger

Communications

- Notifications
- Group channels
- Test-instance communication channels
- GDPR compliant



Pricing Model Principles

Annual participation fee.

Unlimited Products, Versions or Shared Test Inputs

Fees (€) are based on **company size and role** to attract *creator* products thus appealing to *consumer* products.

Participant Level	Creator Participant	Consumer Participant	Both
Large Vendors (>2500 FTE)	1000 €	4000 €	5000 €
Mid-Sized Vendor (250-2500 FTE)	500 €	2000 €	2500 €
Small Vendors (< 250 FTE)	200 €	800 €	1000 €

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Complementary roles of SHARAZONE and CONNECTATHON™

		SHARAZONE	CONNECTATHON
Target	Audience	Engineering & QA	Engineering & QA
	Participants	Vendors & Open Source	Vendors & Open Source
	Validation	Pairs of Product/Version	Vendor IHE Capability

		SHARAZONE	CONNECTATHON
Prerequisites	Pre-Connectathon Tests		v
	IHE Connectathon Testing Passed		
	Pre-production and product	v	v
	Specific Product version	v	

		SHARAZONE	CONNECTATHON
Testing	Target	Object Content*	IHE Profiles
	Collaboration and remediation	v	v
	Anytime & asynchronous	v	
	Content Creator Test Suite	v*	

** If IHE Content Profile available for specific Object (Test Item), Connectathon passed expected*

10 SHARAZONE Founder members volunteered and tested in 2021:

VISUS	**Agfa Healthcare**	**GE Healthcare**
Philips	**Synedra**	**MedicalPHIT**
Siemens	**OLYMPUS**	**ZEISS**
	MedicalCommunications	

SHARAZONE Contract vetted, workflow and tooling validated, value confirmed.

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SHARAZONE: Future direction

Current goal:

Reach sustainability w/DICOM community

Grow participation: SDOs, IHE RO, IHE PALM

Mid term plan:

Customize SHARAZONE-*athon* specific project content with multiple content types (e.g. CDA, FHIR documents, etc..). Projects such as national/regional projects, or Sequoia Data Usability Workgroup.

Long term plan:

Establish other generic SHARAZONE communities based on specific standards. Challenge: synergy/critical mass between creators & consumers.

Open to all vendors of Products exchanging DICOM Objects.

Your company may immediately join by submitting your signed **IHE SHARAZONE Contract.**

Request your IHE SHARAZONE Contract from:
www.ihe-europe.net/IHE_SHARAZONE

For information on IHE SHARAZONE contact:
secretariat@ihe-europe.net

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Benefits - IHE SHARAZONE Members

Open to All Organizations, world-wide, with released (or to be released) Products (Commercial or Open Source).

Number of Systems	Creator Systems	Consumer Systems
Small Vendors (< 250 FTE)	3	3
Mid-Sized Vendors (250-2500 FTE)	4	5
Large Vendors (>2500 FTE)	9	7
Total	16	15

As of July 2022, 17 shared test inputs are posted, resulting in over 54 test reports

These testing opportunities will continue to expand.

An effective collaborative spirit: Participants meet every month as a group with the IHE-assigned moderator to review test progression, tooling, and communication channels

Stability : managed by IHE-Europe & operated by IHE Catalyst.

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Benefits - IHE SHARAZONE Member

Your company may register one or more Product version (or pre-product) either as a Creator of Shared Test Items, or a Consumer or both.

Your company may **test any time 24/7**.

Your company **may share and/or download as many Shared Test Items as desired**. Only requirement is for Consumers of Shared Test Items to perform the associated test suite and return a test report (to encourage more Creators to share more Test Items !!).

The **IHE SHARAZONE Moderator** is available to assist you.

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