



Grand Launch
November 1st, 2021

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.

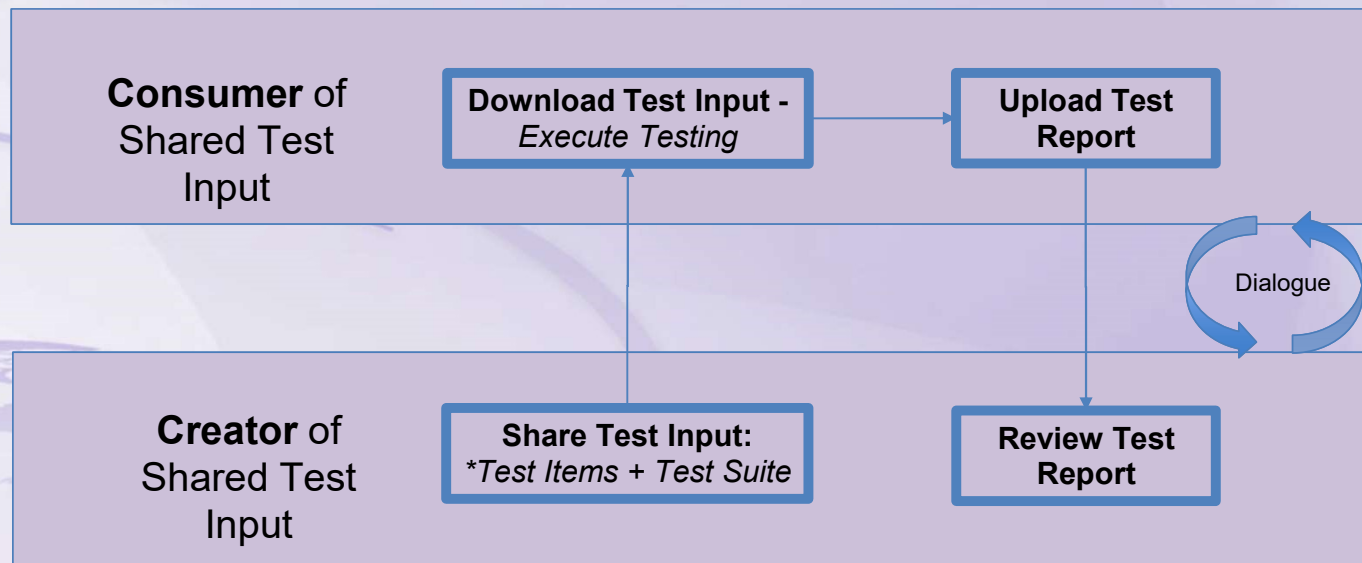
IHE SHARAZONE - Benefits

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™

**After successful Pilot with 10 vendors:
Grand Launch November 1st, 2021**

Process Overview (1)

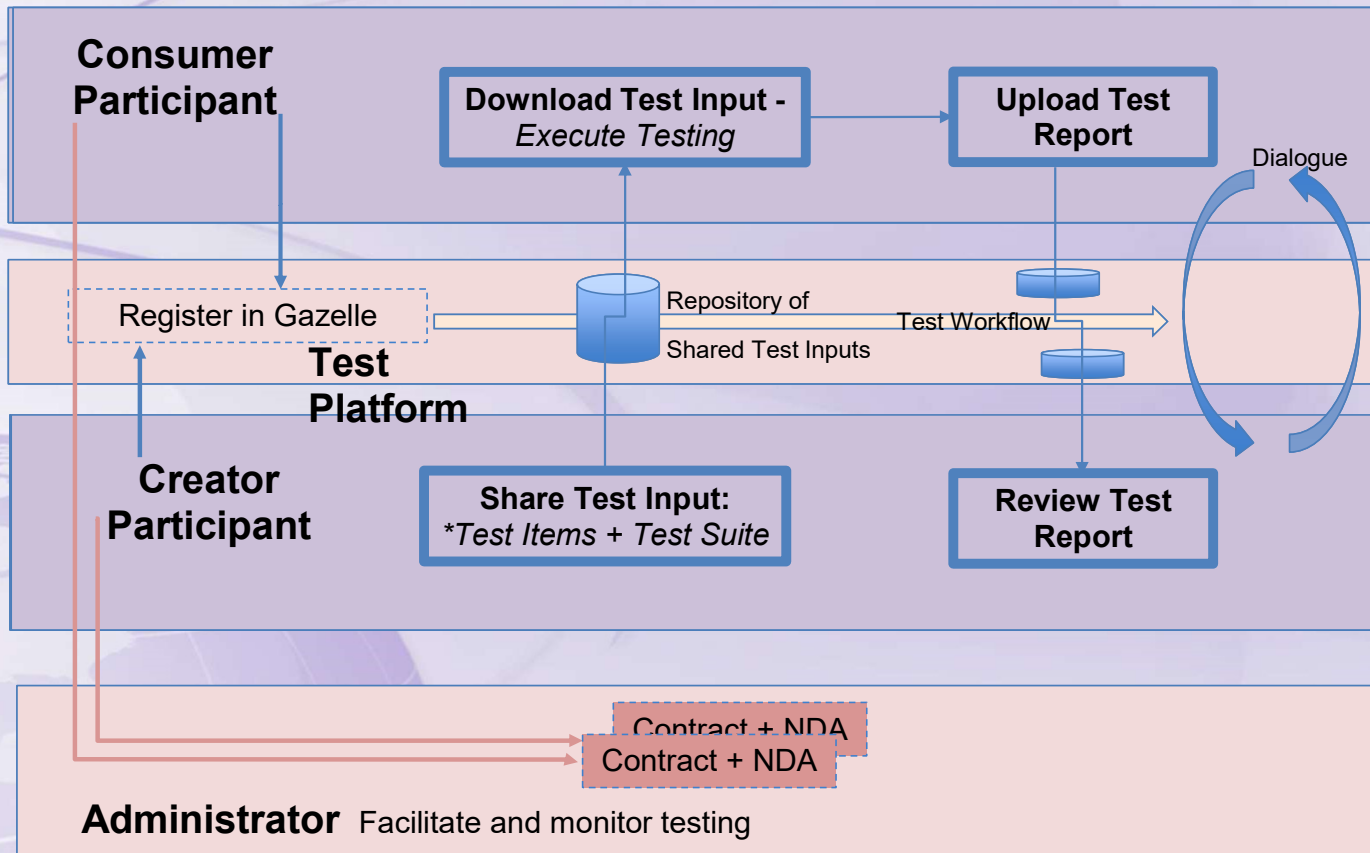


**Test Items = DICOM Datasets*

Test Suite = Intended testing for the Test Items

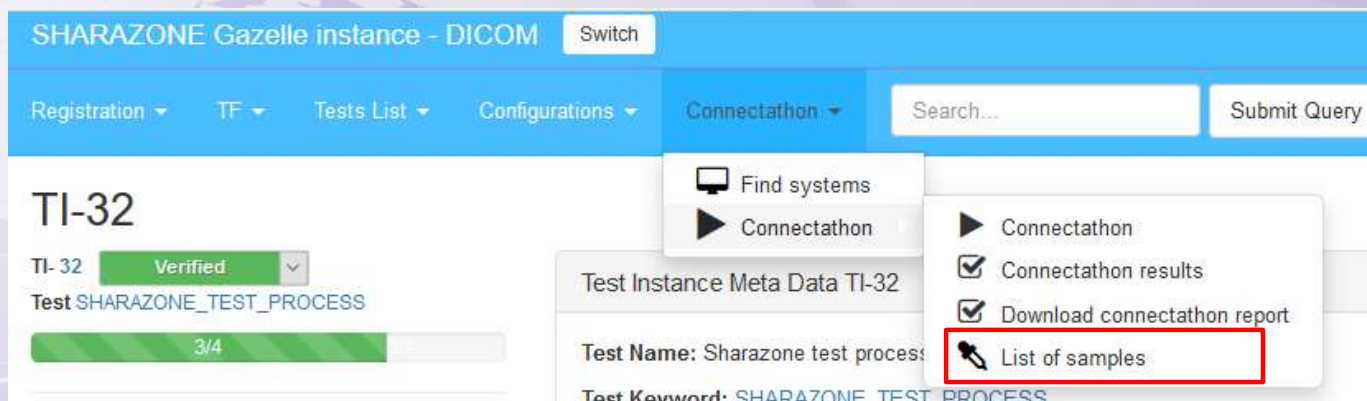
**Test Report = Test Suite with test results recorded*

Process Overview (2)



SHARAZONE Gazelle Instance

- Organization and user accounts in the SHARAZONE are distinct from North American and European Gazelle instances
- Each organization can register an unlimited number of products
- Shared Test Inputs are uploaded to “Samples”



SHARAZONE Gazelle instance - DICOM Switch

Registration ▾ TF ▾ Tests List ▾ Configurations ▾ Connectathon ▾

TI-32

TI-32 Verified ▾

Test SHARAZONE_TEST_PROCESS

3/4

Find systems

Connectathon

Connectathon

Connectathon results

Download connection report

List of samples

Test Instance Meta Data TI-32

Test Name: Sharazone test process

Test Keyword: SHARAZONE TEST PROCESS

Finding Samples

Organization :

GE - GE Healthcare

systems

PACS_GE_UV

Samples to share

Samples available for rendering

Export to excel

You have to render/consume some of the following objects that your peers have created. You can also add a comment on these samples.

Shared Test Input - DICOM

CONTENT_CREATOR_IHE-EU_GE_GSPS_Labeling

CONTENT_CREATOR_IHE-EU_testCT

MOD_GE_IF

CT_PR-SPINE-GSPS

MOD_IHE-EU_kickoff

MOD_OLYMPUS_nCare_10.2.3

nCare DICOM Image Baseline

nCare DICOM Image Lossless

nCare DICOM Video MP4

MOD_Siemens_Xceed

CT-ABDOMEN-IMAGE / First Supplement 188 Images

CT-N.A.-SR / Radiation Dose Structured Report containing SSDE

PACS_Agfa_ENTERPRISE IMAGI-820

PACS_CZM_ZeissConnectApp-5.0

GM-NOBODYPART-IMAGS_VIDEO

PACS_GE_UV

PACS_MedicalC_ASHVINS_2021

Anterior chamber of the eye - ophthalmic images (OP/OPT)

Ophthalmic Key Measurement Report

PACS_synedra_AIM_Niobe_22.0

XC-NOBODYPART-VIDEO

Click on the sample name to see details

Shared Test Input - DICOM - DICOM Shared Test Input | CT-ABDOMEN-IMAGE / First Supplement 188 Images

Id: 7

Sample Name: CT-ABDOMEN-IMAGE / First Supplement 188 Images

Sample Type: Shared Test Input - DICOM

System Creator: MOD_Siemens_Xceed

Organization: Siemens Healthcare GmbH

Date of creation: 10/15/21 2:38:04 AM

Usage: connection

Permanent link: <https://sharazone.ihe-europe.net/gazelle/objects/sample.seam?id=7>

Description

Summary of the content of the Shared Test Input: One series of MultiEnergy images, created based on the new Supplement 188. As an initial (simple) test you are asked to load the images into your application and check if the MultiEnergy specific parameters are interpreted and visualized correctly.

List of files:

- IHE-SHARAZONE-TEST_SUITE_SUPP188_1.docx
- Supp188-1.zip: MultiEnergy series

This is just an initial rough test. Further data will follow with more specific/extensive test suites.

File(s) uploaded by the creator of the sample

| Type | File name | Last validation status | Actions |
|------|---------------|------------------------|--------------------------|
| 7ID | Supp188-1.zip | NOT PERFORMED | Download |

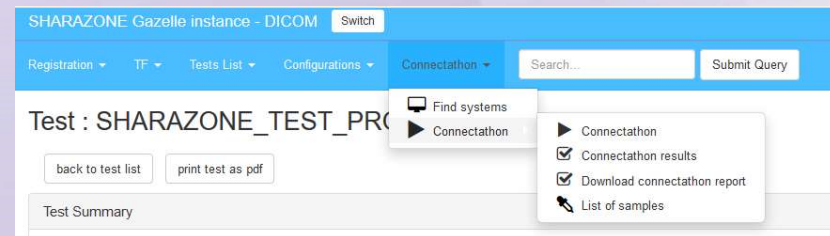
Snapshot(s) uploaded by the creator of the sample

| |
|--|
| |
|--|

Enhancements identified to improve search functionality

Testing

“SHARAZONE test process” is used to manage SHARAZONE testing



Main Connectathon Page

Search Criteria

Testing session: DICOM

Organization: Show all

Domain: Show all

Integration profile: Show all

Transaction: Show all

Results: Show all

Last update: 7/20/21 3:23:46 PM

System: (1) CONTENT_CREATOR_OLYMPUS_nCare (10...)

Actor: Show all

Int Prof. option: Show all

Test Type: Show all

Save search criteria

You can add up to 4 filters presets for this page :

Name of preset:

Save

Check the box if you want to make it your default page

None

| Profile | Actor | Profile Option | Type | R/O | Partners | V | W | P | F | Vendor comments |
|------------------------|-----------------|----------------|------|-------|----------|----------------------------------|----------------|----------|----|------------------|
| DICOM | CONTENT_CREATOR | NONE | T | 1/0 | | 100% | ? | ? | 0% | Please Select... |
| Test | | Meta test | | | | | | | | |
| SHARAZONE_TEST_PROCESS | | | | R / 1 | | 14 15 16 17 25 26 | 22 28 31 | 18 21 | | |

Creator product

Tests in progress

Reviewed test reports
(Verified)

Waiting for Verification

Sample Test Report

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 |
|----------------------------|---------------------------|
| gsp5.dcm | Sample for test |
| img568.dcm | Secondary Capture Phantom |

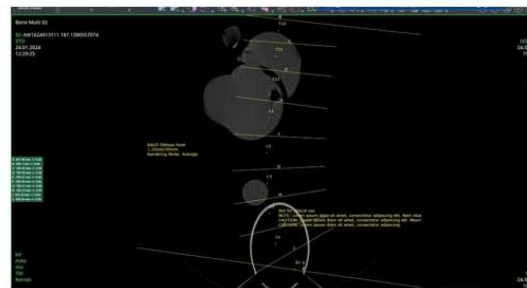
Patient "Bone Multi 02"

Test Script

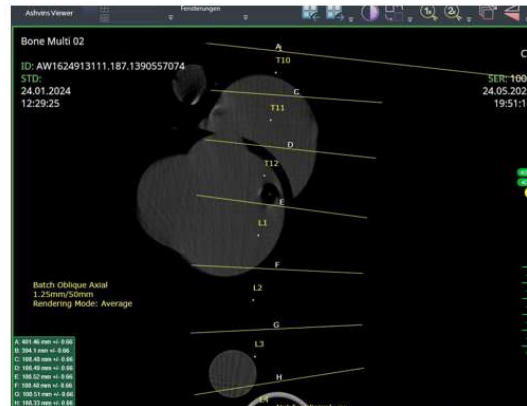
| Step | Action | Expected Result | Actual Result | Pass/Fail |
|----------------------|---|---|---|-----------|
| Import | | | | |
| #1 | Import Test Items into Consumer application | Study, Series Image hierarchy are imported as described in the Test Input section above | 2 series imported | Pass |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

Ion1



Zon1

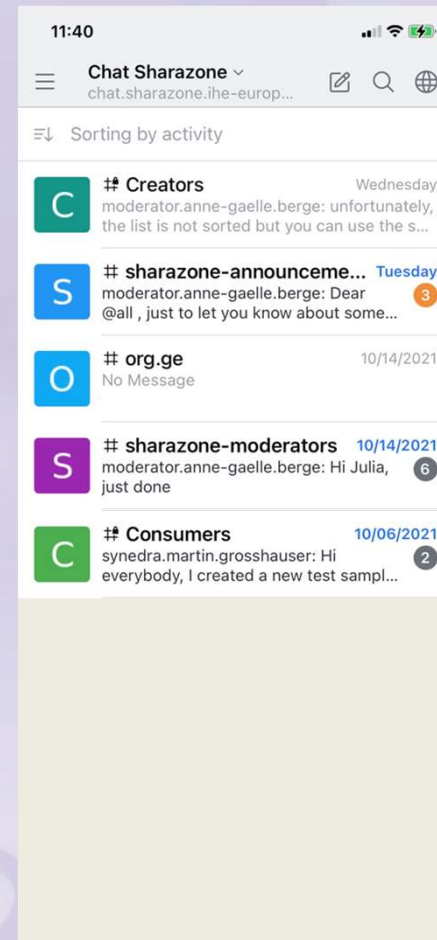


- Template available in Gazelle
- Dialogue may occur in Gazelle or Rocket.Chat

Rocket.Chat Messenger

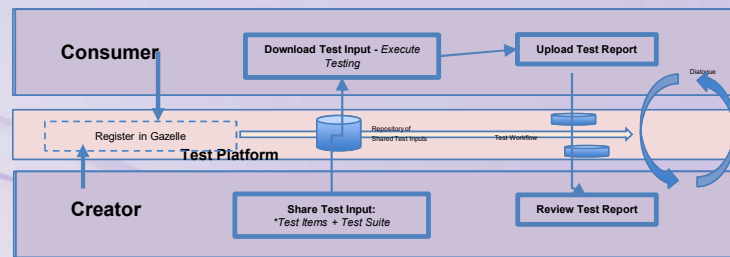
Communications

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



Openness, Confidentiality & Effectiveness

- **All Consumer participants** access Shared Test Inputs made available by all Creators.
- **Consumer participants** engaging in a test session for a Shared Test Input, to perform testing per the Test Suite provided by Creator.



- **Creator participants** of a specific Shared Test Input access corresponding test report(s) produced by Consumer(s), → Confidence for candid feedback from Consumer participants.
- **Creator participants** of content naturally encouraged to produce:
 - *quality Shared Test Input* with realistic Test Items (DICOM objects)
 - Simple but relevant test suite instructions to ensure meaningful testing by the Consumers.

Any vendor organization may participate in IHE SHARAZONE:

- With Released (or to be released) Product (Commercial or Open Source)
- Contract including NDA policies
- Yearly fee as either Creator Participant, Consumer Participant or both.

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 € |

Pilot

- **10 SHARAZONE Founder members** volunteered and tested over the last weeks:

VISUS

Agfa Healthcare

GE Healthcare

Philips

Synedra

MedicalPHIT

Siemens

OLYMPUS

ZEISS

MedicalCommunications

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

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

GRAND LAUNCH: November 1, 2021

- Based on the positive feedback from 10 Founder Member Companies, IHE SHARAZONE is announcing its Grand Launch 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

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.

Benefits - IHE SHARAZONE Member

From the start, **one immediately leverages the seeding thanks to the Founder Members:**

- Close to **15 products** are already engaged from **10 leading vendors**.
- Close to **15 Shared Test Inputs** are available to test with. They already resulted in over 30 test reports.
- More than **10 products** are ready to test your Shared Test Items
- These testing opportunities will continue to expand

Join

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Join

"The IHE SHARAZONE pilot phase provided us with the opportunity to test established as well as novel DICOM features. In a professional and cooperative environment, we were able to solve any issue that might arise directly with other IHE SHARAZONE participants. Last, but not least, IHE provides helpful tools for both test management and vendor communication."

Synedra IT, Martin Großhauser

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“With IHE SHARAZONE, IHE offers an outstanding framework and robust platform for testing DICOM object interoperability between medical imaging products of different vendors. We are convinced that this offering is an excellent opportunity to collaborate to improve the quality of healthcare through better interoperability of medical imaging products.”

Carl Zeiss Meditec, Janna Lingenfelder, Head of Interoperability and Data Quality,

IHE SHARAZONE

A decorative graphic consisting of several grey stars of different sizes and several grey lines of varying lengths, some straight and some curved, scattered around the text "IHE SHARAZONE".

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“For an Enterprise Imaging vendor like us, IHE SHARAZONE offers a very valuable test service. It allows us to continuously test all types of DICOM images, videos and their associated objects. That way, any new type of DICOM object that is proposed by the Creator participants is thoroughly tested and potential interoperability gaps are fixed, before it is deployed at healthcare provider sites.”

Agfa HealthCare, Bruno Laffin, V&V Connectivity Team Lead

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“We’ve been part of IHE SHARAZONE through a very engaging co-learning and testing environment where participants can collaborate easily and smoothly. Especially, our Head of Product Management Office, *Francis do Rego*, has been very active in collaborating with his peers in providing the right support. We can strongly recommend MedTech companies with a focus on interoperability to join IHE SHARAZONE.”

OLYMPUS EUROPA, *Engin Demirel, EMEA Head of Product Mgt, Marketing and Sales*

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IHE SHARAZONE turns out to be a very effective means as a creator to get quick and profound feedback from the other participants about appropriateness and compatibility of the created/uploaded DICOM objects. As a consumer, IHE SHARAZONE enables you to get early access to DICOM instances based on the newest enhancements of the standard to prepare your products to deal with them properly.

Siemens Healthcare, Till Hoenig, Computed Tomography

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"IHE SHARAZONE is a great opportunity to test, as an addition to the IHE Connectathons, our products directly with other vendors. We enjoy the ability to continuously test the interoperability of DICOM objects with other IHE SHARAZONE participants."

MedicalCommunications, Alexander Gogol

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