

### The DICOM cloud for medical images & documents

Archive, view and share images, findings and documents (telemedicine)





# Cloud



## based telemedicine and archiving

for practices and hospitals

Cloud solutions have been tried and tested worldwide. This technology provides access to state-of-the-art software services on a pay per use basis, while simultaneously reducing the need for expensive computing and communications infrastructure in the office.

An ever-growing number of companies has chosen to rely on services and storage hosted remotely in the "cloud". Today's high data transmission rates make remotely hosted services ranging from simple image backups to complete collections of servers increasingly attractive. Applications and data stored remotely are accessible wherever a connection to the internet exists.

A daily challenge in human medicine is processing the large volume of images generated by modern equipment. Medical diagnostics greatly benefit from advances in high quality imaging techniques and at the same time is faced with growing data volumes.

*ORCA*<sup>®</sup> (OR Technology Cloud Archiving) is a software solution designed to make every day work in private practices and hospital easier, cheaper and more efficient. *ORCA*<sup>®</sup> archives **medical images and documents on its remote access servers using highest security standards**. At the same time, *ORCA*<sup>®</sup> is an online platform for **sharing medical images and findings with doctors and other authorised persons**. The storage space can be individually adapted to current requirements.







## Application

**ORCA**<sup>®</sup> offers two exciting applications: **ORCA**<sup>®</sup> Archive and **ORCA**<sup>®</sup> Share



**ORCA**<sup>®</sup> Archive

#### Archive and backup solution

*ORCA*<sup>®</sup> *Archive* transfers and stores image files from direct sources (e.g. digital X-ray, CT, MRI and ultrasound systems) as well as from PACS (Picture Archiving and Communication Systems). *ORCA*<sup>®</sup> *Archive* can be used as a backup solution.

Wherever the internet is accessible, images archived in the cloud can be viewed at maximal resolution and quality (DICOM) via the integrated browser-based *ORCA*<sup>®</sup> *View* program and our acquisition software *dicomPACS*<sup>®</sup>.





#### Communication platform and telemedicine solution

At the same time, *ORCA*<sup>®</sup> is a platform for sharing data with external partners. The application *ORCA*<sup>®</sup> *Share* facilitates exchanging images, documents and medical findings with colleagues and specialists. *ORCA*<sup>®</sup> *Share* can also be used to give patients access to medical reports and images.

Recipients are sent an access link to specific files via email. There is no need to install software locally.





#### Test ORCA<sup>®</sup> for free

Login to your free ORCA® Share account. With account you can upload up to 10 cases to the cloud and share them with an unlimited number of recipients. Further transfers can be purchased under a flat rate or pay-per-use plan.



## **DICOM Cloud specification**

for medical professionals

 Secure image and document storage as well as easy access for authorised persons

Efficient workflow – optimised for medical applications

- Can also be used in special work environments; at sea, at home or to consult specialists in various fields
- Images available in JPEG format and lossless **DICOM quality**
- **Comprehensive editing**, measuring and reporting tools
- Also optimised for use on mobile devices
- Straightforward and intuitive handling

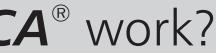
### How does **ORCA**<sup>®</sup> work?

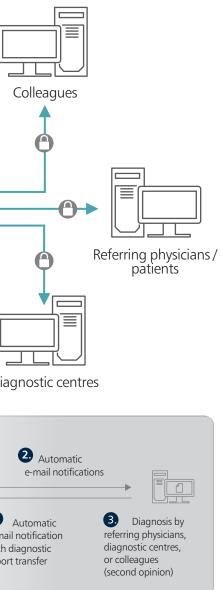
#### **Upload** images / documents documents Access images / **Share** images / documents dicomPACS<sup>®</sup> DICOM store ORCA Colleagues Foreign PACS [VNA] < ORCA Archive **ORCA** Share DICOM store P 0 $\square$ 0 DICOM store $\square$ Modalities 0 ORCA View (CR, DR, US, CT, MRI, etc.) Access the images using any internet browser $\equiv$ or Diagnostic centres DICOM file import directly via https://orca.de.com Share procedere 2. Automatic $\equiv$ e-mail notifications DICOM store 4. Automatic 1. Authorise access 3. Diagnosis by in dicomPACS<sup>®</sup> to a report in the cloud referring physicians, e-mail notification on computers with with the help of the with diagnostic diagnostic centres, or colleagues integrated address book Windows or Mac report transfer (second opinion) operating systems

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please see: www.or-technology.com









Stationary application: Image import from any PACS and image archiving of medical images directly from the modality in the DICOM cloud

Mobile Application: Archiving of medical images in the DICOM cloud for mobile use in emergency medicine



### Advantages

### of the DICOM Cloud

### for stationary and mobile applications

#### Fast access

Register on https://orca.de.com and begin working with ORCA® immediately.

#### No expensive equipment

*ORCA*<sup>®</sup> provides access to remote servers and software solutions. There is no need for an office filled with expensive equipment. Billing is usage based (flat rate or pay per use).

#### **Excellent scalability**

System memory can be adjusted according to your requirements.

#### 24/7 access

Images and documents are accessible at any time from all mobile and stationary devices with an internet connection.

#### Straightforward

The user-friendly interface is self-explanatory. Support is available online.

#### No more service contracts

ORCA® is automatically updated and serviced without extra charges.

#### Data security

*ORCA*<sup>®</sup> guarantees automatic data backups and high security standards. Data loss as a result of malware or hardware failure is a thing of the past.

#### Accessibility

Excellent accessibility is ORCA®'s top priority.

#### Fit for the future

ORCA® archives all data in modern computing centres. The server technology is regularly updated.

#### Communication

*ORCA*<sup>®</sup> is also a communication platform. Sharing images and documents with doctors and other authorised persons is a breeze.

#### Optimal workflow

ORCA®'s many special functions and settings make workflow customisation easy.

Images can be downloaded from the cloud to a local PC and imported into the existing PACS of any manufacturer.

The ORCA® database can be accessed directly from *dicomPACS*® by OR Technology

Each generated X-ray image can be archived directly in  $ORCA^{\circledast}$ .



## Upload and archive

A selection of the ORCA<sup>®</sup> Archive's outstanding benefits for medical applications [excerpt ...]



#### Import images from any PACS

Images and documents in DICOM format can be sent directly to ORCA<sup>®</sup> from any PACS. Alternatively, files can be imported and archived via ORCA<sup>®</sup> View.

#### Archive images directly from the modality

All medical imaging devices (e.g. digital X-ray, CT, MRI and ultrasound units) can send DICOM images directly to *ORCA*<sup>®</sup> for archiving.

#### Access images - any time, any place

Images can be accessed via the internet using the ORCA® View program.

#### Import images into any PACS

Images and documents can be transferred from *ORCA*<sup>®</sup> to local computers and imported into existing PACS.

#### Direct access via dicomPACS®

OR Technology's *dicomPACS*<sup>®</sup> software accesses the *ORCA*<sup>®</sup> database directly, without needing to download the images first.



With ORCA® you have a sophisticated telemedicine at your disposal, e.g. in emergency situations at sea or for mobile use in medical emergencies for a special diagnosis by a specialist.

ORCA® guarantees a very simple procedure for assignors and recipients with automatic notification emails and various email templates.



## Share images and documents

A selection of the ORCA<sup>®</sup> Share outstanding benefits for medical applications [excerpt ...]



#### Sophisticated telemedicine

Images can be shared in different ways:

- directly via the ORCA® website using an integrated address book
- via our dicomPACS® image management system

#### Straightforward procedures

Recipients (colleagues, referring physicians, diagnostic centres) receive a secured access link via email. Email templates can be programmed. Image access dates and *ORCA*<sup>®</sup> download permissions can be specified.

#### Medical findings are collated

New findings are appended to existing entries and related documents. The collated documents form the findings history. These documents can be sealed using a digital signature.

#### File attachments for clinical studies

Files in any format (e.g. PDF, Excel) can be appended to clinical studies. This allows relevant documents including consent forms, explanations and other information to be found and accessed quickly.

#### Email template with integrated address book

Email templates for notifications concerning new images can be programmed (e.g., for colleagues, referring doctors, diagnostic centres). Image access dates and download permissions can be specified.

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### Web based viewer

## **ORCA**<sup>®</sup> View for mobile devices (Android or iPad), PCs, Netbooks

Images can be viewed directly via our *dicomPACS*<sup>®</sup> image management system or with the *ORCA View* program.

**ORCA** *View* is a cross-platform application for all browsers and mobile devices. **ORCA** *View* allows doctors and caregivers to access radiological images 24/7, whether they are in the hospital, a practice or making a house call.

Our web based viewer offers all key functions of a professional PACS viewer. In addition to image viewing, the program includes image processing options, comprehensive tools for searching, editing, comparing and exporting, as well as several measurement functions. Custom report templates facilitate writing eports.

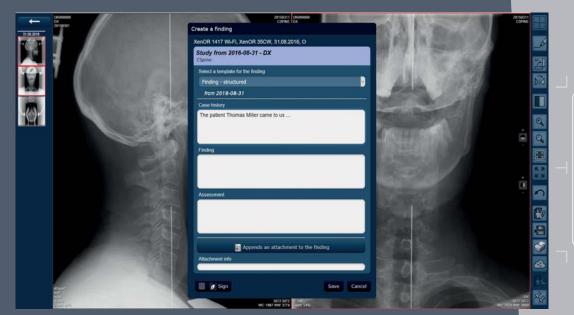
Using ORCA View requires no local software installation.

### Security and data privacy

*ORCA*<sup>®</sup> guarantees secure and cost effective storage of large data volumes in the cloud (DICOM images, documents, attachments). In keeping with highest security standards, your documents are stored and automatically backed up in your designated *ORCA*<sup>®</sup> archive on servers physically located in Germany and subject to German data protection regulations. Malware and data loss as a result of hardware failure are problems of the past. The service is scalable and can be adjusted to your requirements.







Medical reports including customisable report templates



Various functions for image processing: image inversion, brightness and contrast adjustment, resizing



### **ORCA**<sup>®</sup> View basic functions of the DICOM cloud

*ORCA*<sup>®</sup> *View* is a web based image viewer offering file sharing capabilities (email with integrated address book, image anonymisation, etc.), print and export functions, as well as all basic functions for viewing and analysing images:

- Image annotation in various colours (e.g., arrow, text)
- Measurement (e.g., length, angle)
- Reports including custom report templates
- File attachment
- Image comparison using different grids
- Image rotation and mirroring
- Brightness and contrast adjustment, image inversion, zooming in/out
- Full screen and fit image modes
- Image panning
- Image series scrolling
- Cine loop for multi-frame series and MRI/CT
- Document and image export
- Document and image printing

### 🕓 OR Technology

### www.or-technology.com | X-perts in X-ray

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