

## Version 1.4.20.0 (August 2020)

#### Features:

added new feature "Slices of interest" for Tomosynthesis image acquisistion—cut off uninteresting images at the beginning and end of series before saving

#### Documentation:

 updated screenshots for the FTP connection to GENESIS generators on Windows 10 in Administrator's Guide

#### Bugfix:

- when double-clicking on a study node in the right part of patient management, the program crashed sporatically
- o if the GDT response did not contain a recipient ID, the checksum in field 8100 was incorrect, in rare cases the response was then ignored by the receiver system

# Version 1.4.19.0 (June 2018)

#### Features:

- Following a double-click of a node with the patient's name in the tree view the rest of images of this
  patient is downloaded (this might be helpful when only one study was selected or the list was filtered
  before)
- Second and first name are displayed separately in the job list (animal's name and owner's name separately for veterinary version) and sort order can be rearranged for each column
- A copy of an image can be saved in the archive (images can be opened side by side and a number of operations on images can be executed)
- o Marking images by pressing Shift key + clicking thumbnails is now available
- As an option, the progress bar can be disabled when loading images (IPS progress bar)
- o When stitching images, a new image can optionally be saved in a new study
- In the dialog box for import of patients CDs there is an additional button "Import for current patient"
   for automatic acceptance of data of the patient selected at present

### Performance:

 Loading images of a patient with several studies improved, first nodes of all studies are loaded, then IPS started

### Documentation:

 Clarification in the Administrator's Guide that suppression of grid lines for PerkinElmer detectors is a system assembly acc. to MDD

### Bugfix:

- When automatically receiving images in the background, the program might freeze if large numbers of images were received
- If digipaX was started automatically, the archive could not be querried by pressing the Enter key
- o GDT Response: attaching text or DICOM tags before or after the comment field 6227 did not work in the modes series, study and patient
- Name used for a folder for data transfer to burner must not contain "\" and "/" as these are not allowed in the Windows file system (this could occur if date format was set to English)
- When changing patient data with very large number of images the process was occasionally interrupted

# Version 1.4.18.0 (January 2018)

- New module for tomosynthesis image acquisition
  - Acquisition of tomosynthesis image series with connected device Phoenixray manufactured by Teleoptic

- New Body for ultrasound in BodyGenX
- Sending images in background: system processes the sending of new or imported images in the background to the archive while allowing the user to carry on working in the program



- When sending or saving images, the user can define an additional archive the copy will automatically be sent to
- A page can be quickly rotated to landscape or portrait orientation now in the print dialog box, page orientation was available only through advanced print settings before
- Chronicle: optionally arrival date of each image in the archive can be registered and the images can be retrieved by date of their registration in the archive (an extension of the MySQL database and configuration of the archive is required)
- When the patient details are entered manually, the system checks if this patient already exists in the archive if so, the user can choose the identified patient at once
- o Automatic grid stripes suppression for image acquisition by PerkinElmer

#### Bugfix:

- While retrieving records of a patient in the surgery management system via GDT it could happen that the program froze at an attempt to retrieve records of another patient when the images have not yet been loaded
- When importing multiple objects (pdf, scans of documents etc.) it could happen that the program crashed
- During setup/update of the version 1.4.17 it could happen that an error occurred while running ipupdate.exe (Side by Side configuration invalid)
- When processing image series the Window Level values of single images are first used until the user changes the Window Level (afterwards the same values for all images of the series)
- When an RTF template with cyrillic character set was used for a Word-Report, in generated reports the cyrillic characters were not displayed properly

## Version 1.4.17.0 (August 2017)

#### Features:

- Additions of the digipaX Procedure Codes for single images for the full-leg and full-spine panormic images for stitching and pooling the acquisitions in Macros
- When updating digipaX manual settings for postprocessing in "human.ip" ggf. are merged with new settings and additions with no need to overwrite the old ones
- o An optional field for manual input of the Accession Number at the image acquisition

### Documentation:

o Hints for data backup regarding choice, storage and lifetime of storage media in the Manuals

#### Bugfix:

- When loading a patient CD with the Structured Reports it could happen that the program froze
- When using calibration of the dose indicator for more than one detector the values of the previous detector were still listed in the table for the next detector
- When using image crop after image acquisition the programm could freeze if the image crop was not confirmed or was rejected
- When moving a severely zoomed-in image in the print preview it could happen that the zoom has also been changed

## Version 1.4.16.1 (June 2017)

#### Bugfix:

o the program crashed sometimes because of memory overflow during stitching

## Version 1.4.16.0 (May 2017)

- New module Stitching:
  - o Automatic and manual merging of subimages to combine total body part (panoramic) images
- Features:
  - o Inserting date of birth of patients can be disabled
  - When using GDT information on sex in GDT file for job creation or image acquisition is always applied (if false or does not exist in the archive)
- Performance:



- o IPS also loads small images from CD/DVD (patient CDs)
- Documentation:
  - Description of the x.concept connection in Administrator's Guide complemented
- Bugfix:
  - o Image acquisition: if one of the window level functions "Insert rectangle" or "interactively with the mouse" is still active on save study process, than it was no longer possible to use the software

## Version 1.4.15.0 (March 2017)

#### Features:

- Grouping of the jobs in the job list (left side 1 row per patient) can be modified by "Patient name + StudyInstanceUID" or "Patient name + job number" (subdivision of the studies for one patient is therefore possible)
- Improved backup function for the X-ray journal
- Fields for selecting personal names (requesting physician, radiographer etc.) can be selected quicker by typing in the initial letters in the row by which all entries with typed-in initial letters show up in the list (searching by surnames)
- More accurate import messages when importing the patient's CDs or single images when the image(s) have yet been imported under a different name or with a different patient's ID
- o Markers (L,R) and text are now available for acquisition of MRI images
- One Presentation State per series (not per single image) is created for CT, MRI and RF series which gives far better performance when working with these series
- Extended mouse functions: scrolling through the series with pressed left mouse button or with Shift and pressed right mouse button
- o Additional scrollbar on the right image edge for simple navigation in the series of images
- Synchronous scrolling of associated CT or MRI series when they are open in separate windows side by side (parallel scrolling, window level, zoom)
- o Projections (average value, minimum or maximum intensity projection)
- Optionally scout lines of all visible images can be visualized (for each visible image a corresponding scout line is visualized in the active image)
- For each configured image archive it can be defined if retrieval on PatientRoot level is possible (otherwise always StudyRoot level)

### Performance:

- o Quicker read-in of patients' CDs
- Quicker read-in of single files
- Small-size images (< 5 MB) are loaded ad hoc, therefore faster work with the series that contain many small-size images
- o Improved memory management (RAM)

### Bugfix:

- When a default filter was disabled during the acquisition of MRI images, it nevertheless remained active
- Vita Flex Veterinary Version: if a "-" character happened in a Procedure Code the Code did not work and the images remained unprocessed (only in veterinary version)
- with Windows burn engine was always only one burning drive available although there were more than one installed
- o the program crashed in veterinary version when user tried to edit local patient data
- EasyReports could be broken after editing the patient data with EasyReports (it just happened if the reports were still in cache shortly after creation)

# Version 1.4.14.0 (November 2016)

- o Device connection Perkin Elmer:
  - Multi-detector solution up to 3 Perkin Elmer detectors can be connected simultaneously for the image acquisition (table, wll stand, free exposure)



- Calibration of detectors has been integrated in digipaX and simplified, the manual is available in the download zone (XIS software is no longer necessary)
- Status indicator for connected panels incl. battery charge level for Wi-Fi models + displaying information on device
- Adjustment of calibration of the dose indicator for multi-detector solution
- Improved detection of the mask for calculation of the dose indicator
- Larger area to grab the corners for correction at image cropping generally, it also concerns editing annotations and measurements
- For GENESIS generators Procedure Codes for calibration and constancy test have been added (BodyGenX)
- o Optionally the values for mA, ms and mAs for ProVario (device connection for generator) can be ignored when reading out (manual input of actual values is then necessary)
- o For X-ray image acquisition it is optionally possible that the system learns and automatically reuses the settings for windowing
- Optionally the system learns the exposure parameters (kV, mAs) for organ and beam path and automatically puts them in the input fields of image acquisition and X-ray journal in the future
- Supporting JPEG2000 compression (lossy and lossless) added
- Multiple measurements and annotations in a row can be created without the need for their separate selection each time

#### Performance:

o In case of automatic image receiving larger CT or MRI series could lead to program overloading so that the program did not react for several seconds

#### Documentation:

- Concretization of the system requirements in terms of supported Windows versions and required
   Service Packs in the manuals
- Supplementary safety precautions in relation to protection against power outages in the User's Manual and Administrator's Guide
- Permanent settings for COM-Port for the dosimeter KermaX used in digipaX have been embedded in the Administrator's Guide

### Bugfix:

- o Crash when starting program on Windows XP without the patch KB932716
- A crash could happen at the program start if the dose area product meter KermaX already delivered

## Version 1.4.13.0 (August 2016)

### New device connection:

- Direct connection of the flat panel Perkin Elmer XRpad to digipaX X-ray image acquisition with integrated post-processing
- o Functions exposure index calibration and calculation in accordance with EN 62494-1 for Perkin Elmer
- o Automatic calculation of the rectangle for cropping collimation for Perkin Elmer available

#### Features:

- o Image acquisition:
  - When acquiring an image (especially for MRI) the Accession Number from the worklist job is automatically set for all series of the same study
  - Integration of the internal digipaX Procedure Codes for a direct image acquisition with detectors in digipaX
  - Option BlackSurround (Crop collimation or black surround automatically yes/no) for Carestream Vita Flex added
  - The button "Save study" in the image acquisition modules is active only if at least one image has been acquired
  - Backups of the acquisition modules contain now also the name of the patient

### o Printing:

- Font size of the information in the image can be adjusted when printing
- Adjustment of paper and foil size in the print preview possible



- The hostname of PC can be automatically used as AE Title for easier configuration of the archive connection and for special terminal server connection
  - (in KnownDICOMProviders des Conquests enter only a row \* 104 un" at the end)
- There is an additional option for IPS 2 and 3 that corresponding images are uploaded only into cache and not immediately into main memory
- Timeout can be set when sending images to another archive e.g. in another location over a slow upload (fixed time of 60 seconds before)
- o Support for burning engine IMAPI2 integrated in Windows for creating patients' CDs
- Documentation:
  - o Precise instuctions for conducting VHS measurement in the Vet version
- Bugfix:
  - If a license error occurs a license viewer can be now opened easily without disturbing splash and error dialog windows in the background

## Version 1.4.12.0 (February 2016)

- New module for MS Word reports
  - Creating documents and reports in MS Word or WordPad, in this process the DICOM information is transferred to a Word-XML template or a template in RTF format and incorporated into text of the template (including edition and deletion functions for already existing reports)
- Features:
  - Update Body for mammography in BodyGenX
  - Option GTD response after image acquisition/image receipt for the patient, in this process the series descriptions of the acquired/received images are written in the response on the field 6227
  - Data exchange with the generator GENESIS directly via a directory is now enabled (via FTP connection only to date)
  - o The functions Windowing, Zoom and Moving can be now used also in the print preview
  - During MRI image acquisition the already acquired series are imported (and not after the acquisition software has been shut down as before)
  - These MRI series are available for viewing in the viewer already during running MRI acquisition
  - o Special measurement of pelvic obliquity has been added
- Documentation:
  - o Addition of deactivating "Auto-Play" for Windows 8/8.1/10 in the Administrator's Guide
  - o Addition of the description of the medatixx comfort connection in the Administrator's Guide
  - Section for connecting MEDICAL OFFICE in the Administrator's Guide
- Setup:
  - Update of the Worklist server in the installation packet (supporting multiple connections)
- Bugfix:
  - o Image information, measurements and Shutter were not exported along with the export in JPEG format

# Version 1.4.11.0 (November 2015)

- New module for Hanging Protocols
  - Studies can be automatically hung up in the image viewer according to predefined protocol and predefined layout (i.e. for mammography)
- Features:
  - $\circ$  For frame grabber the modality of acquired series can be set
  - $\circ$  New device interface for Carestream Vita Flex incl. scan dialog box
  - o Integration of the Procedure Codes for Carestream Vita Flex (BodyGenX)
  - o Body for gynaecology in the BodyGenX has been added
  - o Body for mammography in the BodyGenX has been added
  - Automatic sending the Procedure Codes to the generator with the switch for image acquisition (only in combination with a detector and if the generator supports Procedure Codes)
  - Warning message if a user-defined acquisition date differs from the system date when acquiring images
  - Warning message if no image was selected when exporting images (instead of success message)



- For the dose indicator the abbreviation El (ExposureIndex) is now used as the abbrevation Dl is used for DeviationIndex - manual configuration adjusting might be necessary when updating the system see Instructions for Upgrades
- Using the number of the Universal Electronic System for Registration of the Population in Poland (PESEL Number) as the patient ID is possible, the date of birth and sex are derived from the PESEL Number
- Upgrade of the system requirements for LabelPrint up to Windows 10

#### Documentation:

- o Section "Connecting medatixx comfort" has been added in the Administator's Guide
- o Additions in "Section Connecting ALBIS" in the Administrator's Guide

#### Bugfix:

- When accessing to the X-ray journal with the option "read only"digipaX attempted regardless to write a backup, this lead to appearance of an error message
- When using GDT 6311 (Show images) it could occur that the same image was double-presented next to each other
- When attempting to send a manually created patient without images to the archive digipaX could crash - now a message appears that there are no images existing that can be sent

## Version 1.4.10.1 (July 2015)

### Bugfix:

- o after cropping of newly recorded MRI images the program could crash
- o if the module cropping was disabled, it was still available in image acquisition

## Version 1.4.10.0 (June 2015)

- New module for MRI images acquisition
  - The new device connection for Helpic MRI device included
  - o The pecial filter for the acquisition included

#### Features:

- Optionally, the switch ("EnableOrganSelection=true") can be set in the Body2.ini to enable selection of
  just the organ (without beam projection) while creating the job (primarily designed for MRI and
  sonographic units only)
- Series Grid View: hanging up the individual images of the series (MRI, CT etc.) in the grid (simultaneous viewing several images of the series)
- Upgraded print dialog box with extended preview and user-defined image selection (selection of single images of the series)
- o Better error message for DICOM print if no DICOM printer is configured
- The field "Title" in the patient data (Dr., Prof.) can optionally be deactivated as there is no title used in some countries
- The switch for switching over from the patient management to the image acquisition has been added: double-click on any entry in the patient table activates the viewer
- o The job creation incl. Procedure Codes for Protec CONAXX has been enabled
- o DI measurement (PennHIP) for veterinary version has been added
- o CE measurement (centre edge angle of Wiberg) has been added
- A confirmation message appears if a filter is to be removed from the list, to avoid an unintentional deletion and place the Delete button more conveniently

- The error that occurred in the Copy function in EasyReport for the texts in Cyrillic script (false character set) has been removed
- The worklist connection to some devices (e.g. Siemens sonographic unit) did not work if the tag 0040,0009 was missing in the job or was empty
- o in reduced representation the next picture jumps back to windows size when scrolling



## Version 1.4.9.0 (February 2015)

#### Features:

- Editing patient data for saved images of patients is from now on possible directly in digipaX (please refer also to instructions for upgrades!)
- Optional data reconciliation for patient's name and date of birth when transferring via GDT and opening dialog box for editing if the name has changed (e.g. after marriage) or date of birth is not corresponding
- Also, reassignment of studies and series (moved to other patient) is from now on possible (please refer also to instructions for upgrades!)
- Update of internal tag table (Dicom Dictionary) for correct figuring "new" tags for dose indicator
- New language Spanish added
- Better import dialog box dla patient CDs and single files with hierarchic structure and simplified adjustment of patient data
- o New mouse functionality Presentation: simple mouse pointer for pointing on the monitor
- Better test images for measurements and presentations have been integrated in simulation devices (scanner and detector simulation as well as for Teleoptic Alpha)
- o Import of DICOM files through import components has been removed because this module is designed for graphics (JPEG, BMP etc.) or TWAIN only and thus only pixel data and no header data can be imported
- Archiving the logfile (global.log) upon program start if it is larger than 50MB and proceeding with an empty logfile (please refer also to instructions for upgrades)
- When deleting the X-ray journal, an additional warning message that the complete journal will be emptied is displayed along with the password prior to do so
- o Thumbnails can be also displayed in the patient management on the right via tooltips
- GDT interface:
  - Automatic creation of a job in background after GDT transfer is possible (no dialog box is displayed)
  - Transfer of Procedure Codes via GDT is possible, therewith the Codes can be conveniently transferred directly from the patient management
  - StudyInstanceUID, SeriesInstanceUID and SOPInstanceUID can be transferred in the GDT response after image acquisition and re-used for image call-up per GDT
  - 3 optional freely configurable GDT fields for response are available (content of DICOM tags is available as well)
  - Increasing filenames (as opposed to increasing file extensions) can be used
  - Filename of a thumbnail can be written in the GDT response after image acquisition (e.g. Vetera can show this thumbnail in the tab)
  - Option "Remove physician identification" fort he GDT response was hitherto available only in the combination "Require an answer in GDT standard", this goes now on also without enforcing

#### Documentation:

- List of information transferred via Worklist is completed with corresponding tags in Administrator's Guide
- Supplemental information about system requirements and maximal amount of accesses for services of Windows versions in Administrator's Guide
- o Update of chapter Connecting Vetera in Administrator's Guide

- When using two archives with different accessions (one for reading only, the other one for writing only) it could happen that despite this a question occurred which archive is to be used for reading from
- When importing TIFF images with different horizontal and vertical resolution, these were deformed during import
- o If Presentation States were saved in the archive (e.g. by importing patient CD through a third-party software) digipaX crashed while attempting to open a Presentation State
- It could occur for patients with several study nodes in preview tree that the scroll bar was at the bottom whilst the upper thumbnails were displayed



 Sometimes it could occur that changes where not saved after closing picture when just an annotation was changed

# Version 1.4.8.0 (September 2014)

### Features:

- o It is no longer checked for Orex connection if the transfer path for images is empty as this path is located under "C:\Windows" in older Orex readers
- Pregnancy status is inquired for females aged between 10 and 60 years prior creating the job
- Pregnancy status is also inquired for females aged between 10 and 60 years prior image acquisition if the status was not given yet in the jobs
- o Pregnancy status is also inquired while compiling entries for X-ray journal provided that the status is not yet known; the status is internally cached so that no repeated inquiry is necessary
- For patients with different spelling due to e.g. errors in data recording or importing an external patient CD all data sets are accurately listed in the patient list (through internal archive query when identifying Name-DOB-ID)
- For dosimeter KermaX, it is no longer a row written every 10 seconds into global.log in normal log output process but only if values have been received, because the logfile was very large as a result (for detailed log output, queries are still logged)
- Additional column "List" in the job list for differentiation of several configured job lists colour representation can be configured through the Worklist setup
- There is no longer need for double-pressing the tab for so called "Edit & Select" fields in order to e.g. jump over to next field with the tab key in X-ray journal (this applies to job management, patient record etc., too)
- o When image is acquired, image modifications (rotations, crops etc.) are also shown in preview
- o Support for JPEG-LS-compressed images
- After the job is completed, digipaX can be optionally minimized to taskbar or system tray (switch "OK and minimize" in dialog box)
- Arrangement of input fields for study description etc. in the acquisition tab one below the other for portrait mode on the screen, because they were occasionally very narrow
- o For printing list of studies of a patient on CD, sorting begins with the latest study
- o For exporting images, the added consecutive number is always four-digit (0001, 0002,...), so that the images are sorted correctly in Explorer
- While adding beam projection manually via the job management, an UID is immediately assigned so that it can be straightway used for new macros
- In import dialog box (patient CD or images from an external device), modality for each study is also shown
- New switch for calling service programs in acquisition tab for connection of Kodak or Carestream (VITA)
- New switch for deleting a cassette in acquisition tab for connection of Kodak or Carestream (VITA)
- o If values for kV and mAs are not recorded by iCRco system, -1 is always returned as the value, this value is not accepted, the field stays empty

### Documentation:

- o Revision of section for GDT connection DOCConcept in Administrator's Guide
- o Section for GDT connection for Vetera added in Administrator's Guide
- o For label print, print position values for Canon PIXMA iP7250 are added to the table in User's Manual
- Section for GDT connection Apple Tomedo added in Administrator's Guide
- o In order to meet provisions specified in the standard DIN EN 80001-1:2011, section for requirements for computer network is added in Administrator's Guide
- o Revision of Sections 3 Safety information and 4 Installation and maintenance in User's Manual

#### Performance:

Calling acquisition software (e.g. iScan.exe) via digipaX could take a long time for Single-Core-CPUs

- In the option of patient identification "only patient ID", patients were sometimes listed multiply in the Vet version
- o Text annotations were shown only as "????" in some foreign languages (e.g. Russian)



- o It could occur that image cache overflows and grows unbounded in size
- o When a grayscale image has been mirrored and then rotated, rotation went in a false direction
- When an image has been rotated and then cropped after image acquisition, it was too strong zoomed in afterwards
- o If screen splitting in two or more parts was activated in the Viewer, interactive windowing did not work in all image windows

## Version 1.4.7.0 (April 2014)

#### Features:

- o X-ray journal entries can be created automatically for images received in the background
- New configurable additional options for burning patient CDs (e.g. call-up of an external burning engine if burn drive works neither with Nero nor internal burning engine)
- When patient data is entered manually, accidental blank spaces before and behind the name are removed automatically (occasionally, orders could not be deleted in such cases)
- o When patient data is entered manually, date of birth is no longer preset on 01.01.2000 but empty
- Optionally, field for X-ray assistant is re-emptied after saving (useful if several assistants work at one station)
- No more predefined Window Level Presets created
- o If switched to the viewer after image acquisition, newly acquired images are automatically hung up if automatic hang-up is activated
- Connection of DICOM printer Carestream DV5700
- o Better understendable error message if no drive selected while creating patient CD
- Extension of GDT: additional tags can be attached in front of comment box, long back entries (GDT field 6227) can be optionally divided into several lines with automatic word wrap after ca. 60 characters (software of the clinic must support this option)
- New company address has been updated in the info dialog box of digipaX

#### Documentation:

- o New company address has been updated in the Manuals
- o Section on GDT Connecting Compumed M1in the Administrator's Guide has been added

#### Setup:

Linkage to the User's Manual on the desktop

### Bugfix:

- When exporting single images of a study, an error message could happen due to already existing filenames; now ongoing figures are created at the end of filenames
- Occasional crash during direct selection of a study by double-click in the patient management if the study was not activated as a dialog box (not as a card)
- o Memory storage overflow while burning-in several text fields at larger image acquisitions

## Version 1.4.6.0 (January 2014)

- Annotations and measurements module now upgraded: particular objects can be changed, deleted or hidden and shown, measurement data presented already during drawing
- o Special measurement Cardiothoracic Ratio (CTR) added
- o Special measurement Hip Dysplasia (HD) added
- o Special measurement Vertebral Heart Score (VHS) added
- Special measurement Tibial Tuberosity Advancement (TTA) added
- o Special measurement Tibial Plateau Angle (TPA) added
- o When measuring angles, external angle is additionally presented in brackets
- o For new installations in Russian or Ukrainian the Codepage Windows-1251 is preset as default
- When acquiring images, address is always applied from the configuration of the acquiring station to the tag "Institution Address"
- o Time until automatic job deletion can be set up to 336 h (14 days) (max. 48 h up to now)
- $\circ$  If there are 20 files in the GDT import directory, a warning message is displayed once an hour
- Certain presets have been adjusted for a new installation (when updating no settings change)



- Rarely used fields of the job creation are deactivated first
- Involving beam path in the study is enabled
- Number of backups is preset on 100
- Display duration of a status message after image acquisition is preset on 3 seconds
- Update interval of the footer (free storage) is preset on 10 minutes
- X-ray journal can be viewed by using the option "read only" on other stations; sorting of the entries
  has been changed so that the latest entries are at the top
- Certain updates of Procedure Codes in the BodyGenX
- o Image description from job box is now entered as SeriesDescription so that it is shown in the preview tree above the image
- If the license expires sooner than in 30 days, a warning message comes up upon starting the program, no warning message still if more days to expiry date

#### Documentation:

- Connecting ABOMED added to section GDT
- Revision of the section for installation and putting into operation in the Admin-Guide

#### Performance:

- o Loading speedup of large CT and MRT series
- o Import improvement and speedup of individual files, details can be hidden and shown as an option
- Better performance of transferring a patient-CD to the archive
- Better performance of sending the CT and MRT series to the archive (sending as a series and not as single images)

#### Bugfix:

- When rotating a zoomed image, the displayed image section shifted (it could also happen during other operations on images)
- The tag settings for veterinary could not be changed in certain international installations
- o When printing a zoomed image with Display Shutter, the Shutter was printed out displaced sometimes

## **Version 1.4.5.0 (September 2013)**

#### Features:

- o Language support in Ukrainian and Italian added
- Target language Ukrainian and Italian for BodyGenX added
- Connection of foot switch for frame grabber control through RS232 interface (COM port)
- When using frame grabber, sound can be activated for live image transmission and acquisitions for acoustic control purposes
- o When using frame grabber, single acquisitions can be automatically separated in individual series
- When searching for patients IDs in the patient management, the wildcard (\*) is not automatically used so that searching specifically for a certain ID (e.g. ID 1) is also possible
- o An own start image can be used upon program startup
- o Images that are not yet saved can be also deleted using the delete icon at the job in the planning card (not with the right bottom switch only)
- o DICOM header information can be additionally viewed and processed in a text form
- o In the dialog box for selection of a tag, filtering by designation of the tags (e.g. Study or Date) in order to find the tag desired is also possible
- o Warning message appears at the program startup if the license expires
- In the Black Style, sometimes it was poorly to recognize whether the button was pressed, or not (e.g. overlay on or off)
- o Now, the tool boxes, windowing, filters and shutter are also available for X-ray image acquisition
- The mouse function Magic Sharp is also available for X-ray image acquisition
- The GDT-Token of practice management software can be used in patient ID (for data separation)

#### Documentation:

o Addition (rectification) of supported devices for frame grabber to the Manual

### Bugfix:

Indication in the image acquisition card was not applied in the X-ray journal (if it was configured as an optional entry)



- Obspite the setting 'Single images' multiple snapshots were made sometimes when using frame grabber if F9 button or foot switch was kept pressed for a longer while
- If paper size in Windows print dialog box is changed, it is also updated in the preview in the dialog box of digipaX (even if print is cancelled)

## Version 1.4.4.0 (July 2013)

#### New module:

 Image export that exports single images, complete series, studies or patients as JPEG or DICOM into a directory or they can be sent as an email

### Features:

- o Additional filter for contrast enhancement
- Values for Magic Sharp filter can be limited (avoiding stronger tile effects)
- When using Magic Sharp filter the contrast enhancement can be activated automatically with a mouse function as an option
- Adjustable start delay at the auto boot
- Supporting the multi frame images added
- Defect preview images are automatically re-created when loading the preview tree
- The date shown in the record card is automatically updated (e.g. when the programm remains open at night)
- o If there are images with different international character sets and encoding in the archive, they are used correctly (tag 0008,0005 in the DICOM header), the Conquest needs to be extended first for this function, for more see the Administrator's Guide, chapter 5.2.3
- Additional fields for information on patient can be activated in the configuration, for this the Conquest needs to be extended priorly too, for more see the Administrator's Guide, chapters 5.2.3 and 17.2
- o If an image is zoomed in and is rotated, the current field of view remains in the viewer
- If a male patient is selected, the drop down box for pregnancy status in the record card is automatically empty and deactivated
- The display for setup the tags as e.g. information in the corners of the image viewer has been optimized now the designation of the set tags and not only %1, %2 etc. is displayed
- Ouring an archive retrieval the selection of patients in the viewer is not reset and the patients remain uploaded, in this way the patient-CDs can be easier compiled for the medical authority
- o If annotations and measurements in the display for overlays are hidden, they are automatically shown again as soon as an annotation or a measurement is added

#### Documentation:

 Supplement in the Administrator's Guide for troubleshooting during installation of worklists under Windows Vista/7/8 and Windows Server 2008

#### Bugfix:

- o At the automatic saving the EasyReports the last change was not saved when exiting the program
- The zoom factor was sometimes not correctly used when printing or changing the window split
- $\circ\quad$  Occasional crash at the cutting out image during image acquisition now fixed

## Version 1.4.3.0 (May 2013)

- o Dosimeter values can be optionally provided for manual recording entries in the X-ray journal (e.g. in the case of entry made via job management or after image receipt when the images are transferred from acquiring device directly to the archive)
- Automatic hanging up images of the most recent study in the viewer; automatic window split for several series (configurable individually for each modality)
- o For troubleshooting with the license file, the license viewer can be activated via dialog box for license errors on program startup
- Each monitor has ist own active image, so that e.g. histogram for the image on left monitor is no more displayed on the right monitor
- Automatic saving Easy Reports in text files for further processing by third-party systems
- Zoom now also saved in the Presentation States



- o Print of zoomed image areas is possible
- o It can be set for job creation either A: an individual Study Instance UID, B: a consolidated UID for all jobs or C: no UID is to be assigned

#### Bugfix:

Sorting the series in preview tree was not always executed identical

# Version 1.4.2.0 (April 2013)

#### New module:

 Filters: function Magic Sharp directly in the image with pressed left and right mouse key at the same time; new toolbox to the right with various filter settings and possible saving of presets; transfer of filter settings to the viewer of patient-CDs

#### Features:

- When creating a couple of common jobs for one patient all these jobs receive the same StudyInstanceUID
- Supporting images in pure black and white format (no grey levels but 1 bit per pixel) for TWAIN interface and DICOM images

#### Documentation:

Completion of the description for data field "Stud book number" in Admin's Guide (veterinary version)

#### Performance:

- When image series are shown in preview as a stack, a preview image is created for the currently displayed image only
- o The first call-up of the Start button in the footer was sometimes a little bit delayed

### Bugfix:

- Crash of the viewer of patient-CDs when opening CT or MRT series is now fixed
- o for images that have stored in the header a window level and a VOI LUT, the window level settings was not applied and the images was display with another window level

## Version 1.4.1.0 (February 2013)

### Features:

- o Connecting burning robot Primera Disc Publisher
- o Names of threads are minuted in the log for better error analysis
- Copy function of data from the DICOM header
- o Maximal permissible value for mAs has been increased from 999 up to 999.999
- Warning messages for the settings for DICOM connections which can cause troubles (e.g. Never disconnect connection)
- Checking paths and files that are set in the configuration (GDT, caches etc.) upon program launch and warning message if path or file does not exist or is not accessible
- o Red error messages are shown in bold in the log
- As entire study was basically saved after processing of the jobs at the image acquisition, the response option "when the last job ready" has been removed for GDT as well as for HL7
- When GDT directory was not accessible, the monitoring was disabled now, it runs further, so that the
  processing can be resumed when the directory is accessible again
- o Additional data field "Breeding Number" in the veterinary version
- o The text box "setup new study" of the import module is only active when this option is actually

- When selecting a patient via GDT, that was existing in severe archives, the dialog box for selection of the archive was not always displayed
- With large font size, the text in the buttons of the headline was shown incorrectly
- After upgrading preview tree (e.g. while deleting images), the drop-down status of thumbnails was not always properly applied again
- Sometimes a blank error message was displayed when required patient information was missing in the GDT file



## Version 1.4.0.0 (January 2013)

#### New GUI:

- New Start button bottom left through that all components can be activated, the header can be completely hidden to save space and have better overview.
- Functions of upper toolbar are now also incorporated in a toolbox sideways to save space and have better overview (toolbar may remain optionally).
- o Font size and font type of the program can be defined by the user.
- Adjustable icon size on program buttons
- Tabs for tools have been replaced by a drop-down toolbox sideways (right) that can be expanded and collapsed using graphic buttons.
- o Separate elements of toolboxes can be shown and hidden through the context menu of the toolbox.
- o White frame behind dialog and message boxes (better optics)
- o Animated expanding and collapsing of tree preview
- o Coloured nodes in tree view for better overview
- o Icons on large tabs (patient management, image acquisition and image viewer)
- o Large button in patient management for setting up a new patient
- Large button in patient management for opening job management
- Background image can be set up for creating a job and planning tab a standard image is being installed upon upgrade – see Instructions for Upgrades.

#### Features:

- The process for acquisition of images directly with digipaX has been completely rearranged. Please follow the Instructions for Upgrades and the Guides.
- o Transfer of Procedure Codes to the generator GENESIS 50 RFT / GENESIS DT is possible.
- Multiple jobs can be saved in macros and then created per one click (example: purchase inspection for a horse – 18 predefined jobs created per one click). Setting up macros is not possible for the user.
- Adjustment for maximal display of data records in patient management (standard = 500) is now in the Configuration under User/Others.
- Additional search fields for name and patient-CD in the patient management can be shown through Configuration User/Others (standard: off).
- o Better filtering capabilities for retrieval of archives
- o New feature Cine Loop enables autoplay of image series
- User settings for job management have been simplified and now apply automatically to all areas of application.
- o Additional switches for automatic windowing
- o It can be set up whether the first or the last study is to be shown at the top of image preview.
- o It can be set up that only the latest study is to be expanded (more overview).
- o If a faulty tag (unknown data fields) or lossy compression occurs, warning message appears only as text guideline (no more popup).
- Read and write access permission to worklist server is configurable (it's necessary in order to avoid errors if the worklist server is used by third-party systems for those the digipaX has only read access permission, e.g. AGFA).
- o A current image can be also sent by e-mail in JPEG format via context menu of the image.
- Showing and hiding overlays of all kinds is adapted to all images displayed in the viewer (at image splitting 2x1, 2x2 etc.).
- Switchover to full screen mode using Enter key is enabled (Shift + Enter for split full screen view).
- Colour red for annotations and measurements and "like object" for text colour are preset.
- o Presets for initializing and updating the archive are set on "automatically" in new installations.
- o Preset for "Delete worklist job" is set on "automatically" in new installations.
- o Images can be deleted from the archive using password through the GUI. Deleting function must be prior explicitly activated by the administrator. Please follow the instructions in the Guides.

### Performance:

o It can be set up that retrieval of studies (DICOM structure) runs in background when uploading a patient. This saves waiting time when activating a patient e.g. in the case of calling via GDT.

### Bugfix:

Sometimes organ tables were not entirely initialized.



- Automatic generating of a new patient-ID from the name and date of birth did not work with HL7.
- o Image cache could overflow when importing a patient-CD.
- If a GDT file has been received for a patient existing in several archives but action for selection of an archive has been terminated, the GDT was left behind in the directory and no further GDTs with the same file names could be then processed.

#### Documentation:

- Revision of the chapter for connecting ALBIS in the Administrator's Guide
- o Chapter about using Epson PP-100 / PP-100N burning robot in the User's Guide
- o Safety precaution in the User's Guide to usage of redundant systems
- o Description in the Administrator's Guide for special DICOM routing in Conquest

#### BodyGenX:

- o Procedure Codes for ProVario can be also used for DROC.
- o Procedure Codes for GENESIS 50 RFT / DT have been added.
- Revised and new graphics for organ tables with transparent background and additional organ tables for rheumatology in human version and horse in veterinary version

# Version 1.3.8.0 (August 2012)

#### New modules:

- o New frame grabber module for processing video data
- New image series acquisition module, imports images or image series that are created by external devices and sent to the system

#### Documentation:

- Revision of manuals regarding the safety information and precautions as well as general hints for use of hardware and software
- Listing of possible residual risks in the Administrator`s Guide
- Separate section on special framework conditions for use within urgent care facilities in the Administrator`s Guide
- o Section on deactivating of Windows Autoplay function added to the Administrator`s Guide
- o Adjustment of system requirements in the Administrator`s Guide
- o Revision of instructions for image acquisition with XScan and radiology connecting
- o Revision of the section on connecting TurboMed in the Administrator`s Guide
- Description of possible settings for delayed forwarding of images split in series, studies or patients to the export converter
- Connecting MCS Isynet added to the Administrator`s Guide
- o Instructions for connecting various devices incorporated in the Administrator's Guide.

- Name of performing physician can also be specified in the import component now.
- Comment on image is stored as SeriesDescription along with the direct image acquisition with digipaX (only if option ",each image in an own series" is active). Thus the image description is viewable also in the preview tree.
- Acquisition parameters can be received and organs and beam projections selected on devices can be stored as image description by Xcan detector. Data is read from "dx.ini".
- Additional option that the jobs associated with an image are not deleted after the image is acquired (useful when e.g. jobs are managed from another place).
- Study description and series description are shown in two rows in preview tree.
- o If patient`s ID, name and date of birth is set in the configuration, this data is used along with retrieving study data from the archive in order to prevent delivery of study data of another patient with the same ID.
- o BodyGenX: Integration of Procedure Codes for Samsung XGEO GU60 Detector.
- The specified patient or study is accessed directly after program with the program start parameter/pid
   xxx or /study xxx (mainly required if HL7 connection is used).
- Change of syntax for outcoming HL7 messages in HL7.ini, so that it is possible as in the case of GDT connection to send a back entry to the clinic management system (RIS), that is subsequently used for re-opening the study. -> Please follow the information on upgrades.



- Four additional buttons for automatic scanning with programmable parameters such as document feeder, resolution or colour settings for scanner available for TWAIN module.
- Settings for the "Scan" button moved in the configuration from Administrator/Device connection to User/Image acquisition.
- Current image can be sent attached to the email via context menu of the image.

#### Performance

Faster query the large archives

#### Bugfix:

- o Values for windowing settings in the spin boxes and the position of sliders were no longer updated.
- When the standard entry was deleted in the value list of input fields, this entry was again preset with the next opening of the dialog box.
- When double clicked instead of single click on Save while acquiring X-ray images, the program could crash.
- When double clicked instead of single click on patient CD in the header, the program responded no longer.
- When the text mode for acquisition parameters was active and the fields were not set on "optionally", the fields could be in spite of that left blank.
- While changing the "Temp path" (Windows environment variable), the image acquisition with simulation devices worked no longer.
- o It could occur that despite portrait mode the preview was shown in landscape mode or conversely at Windows print. Nevertheless, the hard copy was correct.
- o Buttons in the header of the 2. monitor were shown not in a correct size.
- o While exporting the configuration, some settings were not exported correctly (e.g. monitor settings)
- o While copying any objects to the clipboard (also if beyond the digipaX system), crash could occur.
- o Scanner settings could not be changed in the Scan-dialog box while using the TWAIN module.
- While using Kodak and Carestream connections, the RAW data could not be fully deleted after the images were acquired and harddisk could get overloaded (Please follow the instructions for upgrades).
- o Crash in the case of some images with multiple overlay planes.
- While changing license file, other license files were not shown, if their names were not digipaX.lic.
- o Jobs for the Worklist can now be also safely created and deleted, when patient data contains special characters such as e.g. \ /:\*, "? < > | €. Patients with \ / ^ in their names or \ or / in patient-ID can no longer be created.
- $\circ\quad$  In Vet version, errors occurred while importing images via single files.
- When exporting the X-diary as a CSV file, it could happen that other programs interpret the decimal wrong.

## Version 1.3.7.0 (May 2012)

- New: Multi-monitor module allows usage of multiple monitors
- Documentation:
  - $\circ$   $\;$  The user's guide for digipaX and digipaX-Viewer in Russian
  - o Additions to the description of GDT connection for Medistar
- Feature: The ability to change the administrator's password.
- Feature: The dose-area product can alternatively be given in mGy\*cm 2 (VacuDAP uses these units).
- Feature: Ability to alternatively set units of measurement in mm/mm<sup>2</sup> or cm/cm<sup>2</sup>.
- Feature: Revised product activation procedure with the help of the online order form
- Feature: Connecting the Xcan AG detectors
- Feature: Connecting Carestream CD drive (Carestream software initial settings)
- Feature: In the import component you can import images directly from the clipboard.
- Feature: Images from external systems with spaces in patient ID can be retrieved from the archive.
- Feature: Number of cards with organ tables (Bodies) when creating a job is consistent with the number of modalities used. Number of available modalities is specified in the license file.
- Bugfix: When exporting rotated or mirrored images with integrated overlay, the overlay was not exported along
  with the image (rotated or mirrored image will no longer be transferred to the exported image).
- Bugfix: If digipaX started automatically when Windows starts, the program language has always been German, regardless of what language digipaX was installed in.



- Bugfix: When you enter values for mAs, an incorrect message could be displayed that the value exceeds the
  acceptable range, although it actually did not.
- Bugfix: In the dialog box for creating new jobs some fields did not have default values set.
- Bugfix: The thumbnails on the patient CD were sometimes distorted.
- Bugfix: If the job contained the character "/" in the organ description or beam projection description, the created study description was incomplete (it affected also the entry of the GDT response).
- Bugfix: Warnings about unknown data fields were displayed incorrectly in some circumstances. The warning message now appears only once per study.
- Bugfix: Release memory of the TWAIN interface revised.

## Version 1.3.6.0 (March 2012)

- New: New HL7 interface module for connecting RIS/KIS systems over TCP/IP connections
- New: New "Easy Report" module. Via an input mask users can create comments, descriptions etc. for the patients and store them as compressed DICOM image in the archive. Therefore the JPEG support must be enabled to the Conquest. See upgrade notes.
- Manuals:
  - Screenshots Label Print
  - Description of DICOM tags for the chapter Label Print
  - o Changed description of start.bat for connecting Albis
  - Description in Administrator's guide how to assign misassigned images to the right patient and how to remove images from the archive.
  - Description in Administrator's guide how to configure Conquest to store received compressed images compressed in archive.
- Bugfix: In the Vet version the animal and the owner name were not transferred correctly to the scanner software (Kodak).
- Bugfix: Error while cursor reset in Label Print has been fixed
- Bugfix: Wrong text (character set) when requesting license from an installation in Russian
- Bugfix: Sometimes updates failed after the expiry of the maintenance contract even if the update was published before the expiration.
- Bugfix: TWAIN interface: communication errors occurred with some scanners
- Bugfix: Trial Version: The default archive name and default worklist server name cannot be changed anymore, because they will not work
- Bugfix: With activated zoom rectangle the image cropping and measurements did not work correctly.
- Bugfix: Fixed an error on the DICOM print when username contained Cyrillic characters.
- Bugfix: When you try to start digipaX several times (accidental double-click) the program could crash.
- Feature: The Procedure Codes for Teleoptic Alpha Detector were added to BodyGenX. This eliminates the Procedure Codes for GENESIS 50 RFT, because it is controlled by the Alpha.
- Feature: Every job gets a unique access number. This is necessary when the jobs are further processed by other systems which do not support multiple usage of the same number (DROC).
- Feature: Better and a more clear message when the license file was not found or has wrong permissions.
- Feature: Supplementing Procedure Codes in BodyGenX for Kodak
- Feature: Imported or scanned documents are stored in 8-bit format, optionally with JPEG compression. Therefore the Conquest must be configured to store and send compressed images. See upgrade notes.
- Feature: When opening image data with lossy compression then a special note is displayed in the image.
- Feature: If the clearing of the temporary sent folder after image acquisition fails, only after the third attempt an error message appears.
- Feature: When the configured ID is different than the ID in GDT file, no error message is displayed anymore. Only a log entry will be created.
- Feature: New startup parameter "/ami" allows multiple simultaneous launching of digipaX on a computer (multiple instances).
- Feature: Added information about a station name in job summary and added information about priority and appointment in worklist tooltip of the viewer (all job information are visible everywhere).
- Feature: Extension of the patient list: optional columns for address, phone number and comments. To use this feature the data base layout must be extended. See upgrade notes.



• Feature: Warning when opening images with tags with unknown data type, because the content of the images (e.g. existing overlay) may not be correctly interpreted.

## Version 1.3.5.0 (December 2011)

- New Tool BodyGenX: This tool can create predefined organ tables with Procedure Codes for the Human and the Vet Version for different accidents and animal species in different languages. For more read the Administrator's guide
- New Label Print module: This tool can print on patient CDs. You can create and edit templates. Patient data e.g. name or birthday can be taken automatically to be printed on CD. More detailed information is in the User's guide.
- New Disc Producer module: In combination with LabePrint it's possible to use disc producers to burn patients CDs with the label automatically (currently supported producer: Epson PP-100/100N).
- Feature: Automatic start of the viewer of patient CDs can to be turned on and off (dpview.ini).
- Feature: When creating a new patient entry the patient ID can be chosen manually without an archive query (better performance).
- Feature: New built-in burn engine, Nero is not mandatory anymore (burn engine is selectable)
- Feature: Image transfer module: A status display is shown while deleting the images from the release folder after successful image transfer.
- Feature: Path to license file can also be manually entered in line.
- Feature: Zoomed images are smoothed by default in view.
- Feature: Image scrolling is now possible also with the keys "Page up" and "Page down".
- Feature: Creating patient CD from the practice management: The action control "PCD" in GDT field in 8402 with record type 6311 opens the patient and the patient CD component optionally via GDT field 8410 or program parameter "/pcd".
- Performance: Better memory management: No memory overflow anymore on image transfer when transferring large amounts of data.
- Manual: Manuals revised (screenshots)
- Manual: Note in user's manuals: Ask the patients for prior images in the user's manual to avoid double image acquisition.
- Manual: Chapter in Administrator's guide for connecting Vetinf (vet practice management software)
- Manual: English Administrator's guide
- Bugfix: When setting a text annotation, it's shown an operator's help at a low resolution monitor. As long this
  help was displayed no text could be entered.
- Bugfix: When the images of a series were not yet loaded then the zoom factor was not applied correctly when scrolling through the series.
- Bugfix: In the Vet version the animal and the owner name were not transferred correctly to the scanner software (iCRco, Alpha 4600).
- Bugfix: Program does not crash when user has no permissions to the thumbnail folder.
- Bugfix: Error message is not displayed any more when closing patient CD and the CD was already removed from drive.
- Bugfix: If digipaX was already opened by user, digipaX could be started for a second time (twice) via GDT.
   Conversely it could also happen.
- Bugfix: At image acquisition: The default name for the radiographer it was always written to the X-ray log even when another name was entered manually.
- Bugfix: The configuration file "printers.cfg" is no longer overwritten by software update.
- Bugfix: If a new job for a patient was created while existing jobs of this patient are in process on the acquisition station the new job were not listed in the job table (after re-selection of the patient).
- Bugfix: The tag NumberOfFrames is no longer integrated for new CR or DX images so that the images are also displayed in other viewers. When crating a patient CD this tag will also be removed from existing images.
- Bugfix: When using 2 displays: If digipaX was minimized in system tray and stopped by shutting down Windows, then it was started after reboot it always was shown on the first display.
- Setup: By selecting the Human or Vet version the adjusted files display.xml and vet2.ini will be installed (existing files are not overwritten)
- Language support: Added Polish user's manuals



## Version 1.3.4.0 (August 2011)

- Feature: NEW! Scout lines for CT and MRT series
- Feature: An overlay image can be set in Body.ini. This could be an icon or a description and is always shown in the visual organ view.
- Feature: The column widths in the study tree are saved (Patient management)
- Feature: New practical presets for image information in the viewer and some specials for different modalities
  - o Slice information and InstanceNumber for CT/MRT
  - Performing physician, institution and address
  - o Descriptions in multiple lines (StudyDesc, ImageComment etc.)
  - o available in all supported languages
- Feature: See Upgrade instructions! New practical presets in the Veterinary version for the tags (vet.ini) and image information in the viewer (diplay.xml)
- Feature: Characters "/" and "\" in the patient names are no longer supported, because it's unable to create a job for these names (restriction of worklist)
- Feature: No spaces are allowed anymore in patient ID when creating a new patient entry
- Feature: digipaX creates a backup of the digipax.ini on program startup and deletes it after program is closed. If the program shutdown process was not correct this backup will be used as the new digipaX.ini.
- · Feature: The number of ports was increased to COM10 for connecting a KermaX device
- Feature: Extension of multilingualism
  - o attend tag SpecificCharacterSet on reading DICOM files
  - when generating DICOM files the tag SpecificCharacterSet will be set according to the local system settings
  - o changes in Body.ini (for more read Administrator's guide)
- Feature: Demo version has preinstalled organ view tables in installation language
- Feature: New icon for patient CD
- Performance: Image transfer better performance when analyzing received images
- Performance: Optimization of cache control and cache cleanup
- Manual: Tutorial in Administrator's guide how to backup the MySQL database
- Manual: Tutorial in Administrator's guide for connection with MCS Isynet and Terminalserver
- Bugfix: The status of pregnancy is no longer "unknown" for male patients in X-ray journal (box remains empty)
- Bugfix: Error fixed when loading DICOM file for scanner simulation
- Bugfix: When adding a patient to the selection (Multi-Patients-Module) the current image will no longer reset
- Bugfix: Sometimes some special characters were not displayed correctly on the configuration page "Image information" and in the image corners
- Bugfix: Patient CD: Inverting was not integrated when the option "integrate modifications into the image" was selected.
- Bugfix: Program no longer crashes when receiving data in the background (Vet version) when data are stored on Study-Level
- Bugfix: It could happen that in the dialog box for selecting an image archive an hourglass cursor was shown even though the user had to choose the archive
- Bugfix: Creating jobs: If manually editing the cell (line) for job description, the cell had to be left first before the data was accepted
- Bugfix: Dialog box for editing the Window Level Presets: The processing cell had to be left first before you leave the dialog box, otherwise the value was not accepted
- Bugfix: If a filter for modality was set in the patient management (e.g. US only) it may be that on a GDT request not all images of the patient were shown (other modalities)
- Bugfix: During shutdown of digipaX it may not close correctly while it was minimized in the system tray

## Version 1.3.3.1 (June 2011)

 Bugfix: If digipaX receives undesigned values from a dosimeter (e.g. vibration of dosimeter), these values could not be removed (reject empty image)



## Version 1.3.3.0 (April 2011)

- Feature: New options for entry fields for exposure parameters
  - O Decimal point for mAs: with this option, the value for mAs can be provided with decimals and in this format it is also applied in the X-ray journal
  - o Text mode for data entry fields: with this setting, free text can be entered in the fields, such as, if there will be 2 images on one slide (this option is not available when the unit is set for dose area product in  $\mu$ Gy\*m² or the option "enter the mA and ms separately" is activated)
- Bugfix: Using the correct date and time format in the English version
- Bugfix: Adjusted the size of the heading button to fit to the screen resolution and length of labels, so that labels are completely readable in all language versions
- Feature: Easier system handling of patient management: to start the search, it is enough to just press Enter
- Performance: Burning-in letters and text on the images has been significantly sped up
- Feature: Patient CD (viewer) can be run on all computers, without Microsoft library installations
- Setup: Existing configuration files for transfers (Body.ini and BodyPart.xml) are not overwritten when updating
- Bugfix: When large series are displayed in the tree view (more than 500 images per column) the program might freeze
- Feature: New option to delay readout the GDT file: when another system does not save the file in one session, the result is that digipaX cannot process the GDT, because it is locked by the other system. This can be eliminated with a delayed readout function
- Feature: Optionally, identification of a patient can be limited to "patient ID" (in this manner one can overcome the naming conflicts between the management system and image archiving after change-over the data)
- Performance: Quicker tree view building while IPS is active
- Bugfix: When all or many possible data entry fields are inactive when creating an order, the dialog box was too small, and therefore the visual selection of organs was almost not viewable
- Feature: Especially for systems without practice management or GDT locally created patients (who do not yet have images in the archive) are temporarily saved and are also accessible through the network
- Bugfix: If the icon for image acquisition in the footer has been double clicked (single click is enough), it might freeze the system
- Feature: The path for exporting the X-ray journal is saved and the next time it does not have to be set again
- Feature: New in GDT:
  - o GDT connection to veterinarian systems, the GDT fields can be adjusted to the Vet system (mapping)
  - two new GDT fields for modality and station name: if defined (other than 0), their value is used for creating a job and the appropriate fields are initially set (common shortcuts for DICOM are used, like CR. CT. US etc.)
  - two additional GDT fields for the job number and description: if defined (other than 0), their value is transferred to the worklist job: they can optionally be added to the image and also written in GDT feedback (setting follows in the admin configuration / job management)
- Bugfix: Colour selection in the configuration (e.g. overlay colour): when the colour was changed it was taken over correctly but incorrectly shown in the configuration
- Feature: When starting digipaX, initialization information is now displayed
- Bugfix: When opening or importing a patient CD the application was normally closed when digipaX was minimized to the system tray
- Bugfix: If in the Vet setup the tags for study levels, series or image were used, archive search stopped working (infinite loop)
- Bugfix: When opening an image without windowing (in DICOM Header) it was shown in black or white and it
  was necessary to first manually change the windowing in order to see the image
- Bugfix: On the user-defined text list after installation there were already empty standard entries
- Feature: In the Vet version in the dialog box for creating a patient, only the fields that were also selected in the configuration are displayed
- Feature: XML files are now editable also with a simple editor
- Performance: Quicker launch of patient CD viewer
- Performance: Default settings during the installation: CT and MRT series are listed in the tree view as a stack with the first image
- Bugfix: When creating the GDT response file the group "Save the image and receive the image" is inactive, it may be that the response file was saved despite that



- · Feature: When launching the patient CD viewer, a question is displayed if the viewer should be launched
- Bugfix: When using two monitors, the information window (e.g. waiting or saving) is displayed on the edge of each monitor
- Bugfix: When using two monitors and the application is on monitor 2, some dialog boxes in certain areas of the
  application were displayed on monitor 1. digipaX remembers the number of the monitor now, and is always
  displayed on it (it may require 2 restarts of the application)
- Feature: If the patient IDs were not adjusted while importing DICOM images, a warning message will be displayed to prevent incorrect imports
- Performance: Quicker and smoother windowing thanks to higher histogram smoothing, which is now by default set at 10 and may be increased to 20
- Performance: Only CT and MRT series are transferred as series from the archive (Series Level), in all other modalities, as in CR or DX series images are transferred individually (Image Level), there is no need to wait for the full series
- Feature: These changes such as, windowing, reversing or display shutter for one image are now used in MRT series for the whole series (such as in the CT example)
- Bugfix: When dragging the circular shutter to the left or up, the size of the circle did not match
- Bugfix: After the service contract expired, the date of expiry of the contract was not found in the configuration, but the information that the contract did not expire
- Feature: The presets for windowing can be activated also by a single, not double mouse click
- Feature: If an operation on image for a CT or MRT series was launched before the complete series is loaded, a status message will be displayed while loading the remaining images
- Bugfix: If the images of a patient, which already exists in "Archiv1", are to be sent to "Archiv2", a message "Solve the conflict" was shown. This message does not come any more and the images are sent uninterrupted to "Archiv2"
- Bugfix: If the patient was requested through GDT, which exists in several archives, the dialog box for solving the conflict was overlaid with the waiting screen