

This document is intended to be used as user's manual of VetView.

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The user manual that comes with the product may not contain the most updated information on the product

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1. Introduction to VetView

1.1 What is VetView?

VetView is a software program designed to provide image acquisition, processing and operational management functions for Digital Radiography.

VetView performs connects with Flat-Panel Detectors and Generator to acquire digital images. The software also manages information on patients, tests and images through an internal database. It also supports DICOM which allows excellent compatibility with other Radiography equipment and network programs.

VetView provides a streamlined process of multiple workflows. This optimizes any hospital environment for digital radiography.

1.2 Major Functions of VetView

VetView facilitates the acquisition of DR images conveniently through an intuitive user interface. The major functions of VetView are as follows.

- Automatic acquisition of patient information and photo-taking when taking a shot through the DICOM Worklist
- Auto Query that searches the Worklist server at every designated interval, facilitating to handle newly added works rapidly and efficiently
- Display an acquired image within a very short period of time after taking an image.
- Reduce input time for patient information by automatically applying the preset Image Processing Parameter, ROI, Marker, LUT etc. according to different body parts
- Enables a user to take images simultaneously while conducting a variety of functions, including DICOM image transmission, printing, and WorkList search
- Provides a variety of image editing functions, including Contrast, Invert, Flip, Rotate, ROI, and Windowing
- Enable a user to edit images upon acquisition
- Image management functions: test creation, modify and delete of information, move and delete of image, and image storage management
- Supports DICOM 3.0 and image transmission to the PACS server, print and Worklist jobs
- Enables a user to select either Console mode or Clinic mode.

1.3 Copyrights

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All software programs, files, data, manuals and other documents that are included in VetView are protected by the Copyrights Act and the Computer Program Protection Act of Republic of Korea. More details on copyrights are included in product CD or in End User License Agreement that appears when installing the product. Make sure to read it before using the product.

2. System Requirements of VetView

2.1 System Requirements of VetView

- The minimum system requirements for a proper execution of VetView are as follows.
 - CPU : Single Core 3GHz or higher
 - Main memory (RAM) : or higher
 - Monitor Resolution
 - Width : 1280 pixels or higher, Height : 768 pixels or higher
 - Graphic Card
 - Intel Family : Intel GMA 900 or higher / Intel GMA X3100 or higher
 - Nvidia Family : Geforce2 MX or higher
 - ATI Family : Radeon 7000 or higher
 - Graphic Card memory : 256MB or higher (main memory sharing)
- The recommended system requirements for a proper execution of VetView are as follows.
 - CPU : Intel Core2Duo E4400 or higher
 - Main memory (RAM) : 2GB or higher
 - Monitor Resolution 1680 x 1050 (Optimal Resolution 1920 x 1080)
 - Graphic Card
 - Intel Family : Intel GMA 950 or higher / Intel GMA X3500 or higher
 - Nvidia Family : Geforce FX5200 or higher
 - ATI Family : Radeon 9000 or higher
 - Graphic Card memory : 256MB or higher (no main memory sharing)
- The recommended hard disk capacity requirements are as follows
- Memory occupancy of VetView: approx. 1GB
- Additional hard disk space may be needed depending on the type of detector and the number of X-ray exposing attempts
 - 1717 Model : Occupies approximately 36MB for single image
 - 1210P Model : Occupies approximately 20MB for single image

- The operating systems supported by VetView are as follows.
 - Microsoft Windows XP(32 bit) SP2 or SP3
 - Microsoft Windows Vista(32 bit) Business or Home Edition
 - Microsoft Windows 7(32 bit) Professional Edition
- The programs required to execute VetView are as follows.
 - Windows Installer 3.1
 - Microsoft .Net Framework 3.5 SP1 or higher
 - VC++ redistribution package 2005
 - VC++ redistribution package 2008

2.2 Start / Terminate VetView

2.2.1 Start VetView

- Double-click the Launch VetView icon on the desktop and the Log-in window will pop up.
- Administrator and User ID are pre-registered by default on first execution following installation.
- The default password is 1234 and you can add or modify user ID and password at Setting > Account



< Figure 1 Login >



You can also execute VetView by clicking Start > Program > Rayence > VetView> Launch VetView.

Update notification alert will appear on the bottom if there is a need for update. You can proceed with update by clicking the Update button.

Update



< Figure 2 Input Password >

- If you enter your password correctly, the green 📈 mark will appear on the left.
- If you push the Enter key or click the button on the right the Worklist window will appear and the Offset Data will be retrieved.

VetVie	ew Console 🕕	User Manual								
	Worklist	StudyList	Viewer Syste	m Menu			Console Softwa	ire for Digital Radiogra	phy System. V	
	Patient ID	Patient Name	Accession No.	07-19-2011	✓ ~ 07-19-2011	~	Today	3 Days	Week	Q
	Study Description	Sche. & Susp. 🗸 🗸	Any BodyPart 🗸	DX	✓ Physician		Month	2 Months	All	Search
	Aanual Entry Delete	Paste				Emergency	•			
	No. Acc. No. Scheduled	I Date Patient ID	Patient Name	Owner ID	Owner Name	Specie	25			
			Offset Calibratio	libration Data Acquisition n Data Acquiring;	×					
								X		× ×
								S [2]	tartStudy	Edit Study

< Figure 3 Offset Calibration Data Acquisition >

If the detector and PC are disconnected, the ACQ Error message box will pop up. Check the PC and detector connection status.

Worklist	StudyList	Viewer	System Menu			Console Softw	are for Digital Radiograph	iy System.	
Patient ID	Patient Name	Accession No.	07-19-2	011 🗸 ~	07-19-2011	 ✓ Today 	3 Days	Week	Q
Study Description	Sche. & Susp. 🗸 🗸	Any BodyPart	✓ DX	~	Physician	Month	2 Months		Search
	1 Piste				Em	Dergency			
No. Acc. No. Scheduled	d Date Patient ID	Patient Name	Owner ID	Ow	ner Name	Species			
			ACO 5	_	_				
			ACQ EIIO						
		- 19	Error peculiarly from	Windows Sockets					
				ОК					
		_							
							7	_	_
							Sta	rtStudy	Edit Study

< Figure 4 ACQ Error >

2.2.2 Terminate VetView

• Go to the top of the main screen and click the Exit button.

Worklist StudyList	Viewer	System Menu	🛱 Setting 👝 Minimize 🔘 Exit		
Patient ID Patient Name	Accession No.	08-01-2011	~ 08-01-2011 ~	Today 3 Days	Week
Study Description	Any BodyPart	✓ Any Modality	✓ Physician	Month 2 Months	All Search
Edit Info. Delete Paste	•> Send	Print Save As CD B	j če ce te		
No. Send Study Date	Study Description Acc. N	No.	Patient ID Patient Name		
No. Send Study Date	Study Description Acc. N	No.	Patient ID Hanging Protocol Wizard		
					▼ ▼ %
			+ − → Add Reset Reset All	1 Open	

< Figure 5 System Menu >



• Click YES and the program will be terminated.





3. Basic Workflow

3.1 Worklist Registration

Worklist	StudyList	Viewe	er S	System Menu			Console Softv	vare for Digital Radiogra	phy System. 🚺	
Patient ID	Patient Name	Ace		Registration		1 ~	Today	3 Days	Week	
Study Description	Sche. & Susp. 🗸 🗸	Any	Patient ID*	Rayence			Month	2 Months		Search
No. Acc. No. Scheduled	Date Patient ID	P;	Patient Name* Owner ID Owner Name Birthday Sex Accession No. Study Description Species Breed Mobile Telephone Address	Rayence 2 7 v 28 v O v Age (CANINE AIDI Register Capture	Search Search 2011 ~ DD ~ ~ Cancel	Envergency St	Month Decies	2 Monus	All	7 2
								s 🔁	tartStudy	Edit Study

- < Figure 6 Registration >
- ① Click the Manual Entry button.
- ② Input patient information.



③ Click the Procedure button.

Worklist	StudyList Viewer	Sys	stem Menu				
Patient ID		_	Procedure		_		Q
Study Description	Body Part		Procedure Code / Procedure St	ep	Scheduled P	Procedure Step	Search
Manual Entry No. Acc. No. 1 201107281			2 THORAX LAT	THORAX VD			
	THORAX	777	THORAX RD	ТНОКАХ АР			
	Routine 1 Routine 2 Routine	e 3	LSPINE VD	LSPINE LAT			
	EXOTIC FELINE CANINE	EQUINE	TSPINE VD	TSPINE LAT	Delete	Delete All	
				3 Capture	ок	Cancel	• •
						StartStudy	Edit Study

3.2 Procedure Step Registration

< Figure 7 Procedure >

- ① Select Bodypart.
- ② Select Procedure Step(Exposure Menu).
- ③ Click the Capture button.

3.3 Start Capture Mode



- < Figure 7 Capture >
- ① Select Procedure Step.
- ② X-ray expose.



If you do not register Procedure Step, Setting> Options> Quick Study Default Option in the Procedure Step is set to apply.

3.4 Acquire Image



< Figure 8 Acquire Image >



Retake and Reject of Acquired image See the 5.6 Retake & Recycle, 5.7 Reject Image

in Chapter 5 Capture .

3.5 Adjustment



< Figure 9 Adjustment >

① Image Panning & Cropping

Click the the ROI area in images to Crop images

Adjust ROI area and position.

2 Adjustment Window Width & Window Level

Hold down right-click on the mouse and move the cursor up, down, left, and right to adjust window level & width. (Hold down CTRL to use "Fast Mode")

3.6 Close Study



< Figure 10 Close Study >

- 1 $% \label{eq:2.1}$ When finished, click the Close study button.
- ② Use the send to Server or Printer features.

4. Worklist

4.1 Worklist Screen Configuration

Worklist	StudyList	Viewer	System	Menu			Console Softv	rare for Digital Radiogra	phy System. 🗸	
Patient ID	Patient Name	Accession No.		07-19-2011	✓ ~ 07-19-2011	~	Today	3 Days	Week	Q
Study Description	Sche. & Susp. 🗸 🗸	Any BodyPart	~	DX	✓ Physician		Month	2 Months		Search
Et X	1 Durta									
No. Acc. No. Scheduled	d Date Patient ID	Patient Name	1	Owner ID	Owner Name	S	pecies			
								T	A	• <u> </u>
								N 5	tartStudy	Edit Study

< Figure 11 Worklist >

① Main window toggle button and logo

Worklist Viewer System Menu	
-----------------------------	--

- ② Search
 - Search by a variety of search conditions, including Patient ID, Patient Name, Accession No.,
 Date, Study Description, Status, Body Part, Modality, and Refer. Physician.
 - Search a specific time period (day, three days, a week, a month, two months, or the entire period available)

Patient ID	Patient Name	Accession No.	2011.06.18 🗸 ~	2011.06.18 ~			Week	Q
Description	Sche. & Susp. 😪 👻	Any BodyPart 🗸 🗸	DX v	Physician	Month	2 Months		Search

- 3 Main Tools
 - Tools include: registering and deleting information on patient, image transfer, emergency image acquisition, and display of thumbnail list.

- ④ Main List
 - Displays the list of patients to be inspected.
- 5 Thumbnail List
 - Displays the list of study thumbnails selected from the Main list.

	Worklist		Stud	lyList		Viewer	Sys	tem Menu					Console Soft	ware for Digital Radiogr	aphy System. 🚺	
Patient	ID		Patient	Name		Accession No		07-	19-2011	~ ~	07-19-2011	~	Today	3 Days	Week	
Study D	escription		Sche. &	Susp.	~	Any BodyPart		✓ DX		~	Physician		Month	2 Months		Search
Manual Fin		K	Dasta									Emergency	•	тн	ORAX LAT	
No.	Acc. No.	Scheduled	Date	Patient ID		Patient Nam	e	Owne	er ID	Ow	mer Name	Concegories	Species	1 -	1	
1 2	2011071915	07-19-2011	1 15:17:04	Rayence		Rayence				Ray	ence		CANINE	тне	ORAX VD	
2 2	2011071915	07-19-2011	1 15:15:16	test1		test1				test	:1	(CANINE	1 -	2	
3 2	2011071915	07-19-2011	1 15:16:14	test2		test2				test	12	(CANINE			
4 3	2011071915	07-19-2011	1 15:16:43	test3		test3				test	13	(CANINE			
5 :		07-19-2011	1 15:30:04	test4		test4	-			test	t4	(CANINE			
							(4)								(5)	
							\cup									
															_	
																
															StartStudy	Edit Study
	_	_													Ļ	

< Figure 12 Worklist >

4.2 Register Study

- To start acquiring images, it is required to start a study.
- There are two different modes : Manual and Automatic (to be used for emergency image acquisition).
- When connected to the Worklist server, the Worklist test information is automatically registered.



X If Worklist is disconnected the following error message will appear.



4.3 Register Study in Manual Mode

• Click the Manual Entry button and enter the details on the Study.

Worklist	StudyList	Viewer	System Menu		Console Soft	ware for Digital Radiograp	oby System. 🗸	
Patient ID	Patient Name	Accession No.	07-19-2011	✓ ~ 07-19-2011 ✓	Today	3 Days	Week	Q
Study Description	Sche. & Susp. 🗸	Any BodyPart	∽ DX	~ Physician	Month	2 Months		Search
	Parte P			Emergency				
No. Acc. No. Schedule	ed Date Patient ID	Patient Name	Owner ID	Owner Name	Species			
					_			
								• <u> </u>
						sı	artStudy	Edit Study

< Figure 13 Manual Entry >

Registration									
Patient ID*	Rayence	1							
Patient Name*	Rayence	2		Search					
Owner ID		3							
Owner Name		4		Search					
Birthday 5	7 ~	28	~	2011 ~					
Sex 6	0	~	Age 7 0	D					
Accession No.			8						
Study Description			9						
Species	CANINE		(10)	~					
Breed	AIDI		(11)	~					
Mobile			(12)						
Telephone			(13)						
Address									
			(14)						
IS Procedure	16 Registe	r	Capture	Cancel					

- ① Patient ID : Enter the patient ID. (required)
- 2 Patient Name : Enter the patient name. (required)
- ③ Owner ID : Enter the owner ID.
- ④ Owner Name : Enter the owner name.
- (5) Birthday : Enter the patient's date of birth.
- (6) Sex : Enter the patient's gender.
- ⑦ Age : It is automatically calculated based on the date of birth.
- (a) Accession No. : Enter the patient's accession number.
- (9) Description : Enter the study item.

- (1) Species : Enter the species.
- (1) Breed :Enter the breed.
- Description Mobile : Enter the owner's mobile phone number.
- (3) Telephone : Enter the owner's phone number.
- Address : Enter the patient's address.
- (5) Procedure : Register the Study Procedure Step for image acquisition.
- 16 Register : Save and apply registration.

Capture : Register the information on study and switch to the Capture Mode.

Cancel : Cancel the operation of entering study information.

4.4 Register Study in Emergency Mode

• Click the Emergency button.

Worklist	StudyList	Viewer	System Me	nu			Console Softwa	are for Digital Radiogra	phy System.	
Patient ID	Patient Name	Accession No.		07-19-2011 🗸 🗸	~ 07-19-2011	~	Today	3 Days	Week	Q
Study Description	Sche. & Susp. 🗸 🗸	Any BodyPart	~ [XX ~	Physician		Month	2 Months		Search
G ×	Î					D	•			
No. Acc. No. Scheduler	d Date Patient ID	Patient Name	Ov	vner ID	Owner Name	Spe	ecies			
							_			
							_			
							_			
								T	Δ	
								N s	tartStudy	Edit Study

< Figure 14 Emergency >

• The study details are automatically generated as an emergency acquisition.

	Procedure		
Body Part	Procedure Code / Procedure St	ep	Scheduled Procedure Step
	2 THORAX VD / LAT		
	3 THORAX LAT	THORAX VD	4
THODAY	THORAX RD	THORAX AP	
Routine 1 Routine 2 Routine 3	LSPINE VD	LSPINE LAT	
EXOTIC FELINE CANINE EQUINE	TSPINE VD	TSPINE LAT	5 Delete Delete All
		(6 OK Cancel



- ① Body Part: Select a body part to be photographed.
- 2 Procedure Code : Select the Procedure Code of a photographed body part.
- ③ Procedure Step : Select the Procedure Step of a photographed body part.
- ④ Scheduled Procedure Step : Display the selected Procedure Step.
- ⑤ Delete & Delete All : Delete either the selected or all Procedure Steps.
- 6 Capture : Start capturing the image through the registered Procedure Step.

 OK : Register the selected Procedure Step.

Cancel : Cancel registration.

5. Capture

5.1 Take a Shot

Worklist StudyList	Viewer	System Menu		Console Soft	ware for Digital Radiography System.	
Patient ID Patient Name	Accession No.	07-19-2011	∽ ~ 07-19-2011	✓ Today	3 Days Week	Q
Study Description Sche. & Susp.	✓ Any BodyPart	✓ DX	~ Physician	Month	2 Months All	Search
CF X 1				nergency	THORAX LAT	
No. Acc. No. Scheduled Date Patient II) Patient Name	Owner ID	Owner Name	Species	1 + 1	
1 2011071915 07-19-2011 15:17:04 Rayence	Rayence		Rayence	CANINE	THORAX VD	
2 2011071915 07-19-2011 15:15:16 test1	test1		test1	CANINE	1 - 2	
2011071915 07-19-2011 15:16:14 test2	test2		test2	CANINE		
2011071915_07-19-2011_15:16:43_test3	test3		test3	CANINE		
5 2011071915 07-19-2011 15:30:04 test4	test4		test4	CANINE		
					(2)	
					StartStudy	Edit Study
						2

< Figure 16 Start Study >

- ① Select the study information to begin image acquisition in Worklist.
- ② Click the Start Study button.

5.2 Capture Screen



< Figure 17 Capture Screen >



< Figure 18 Procedure Step Unselected >



If you do not register Procedure Step, Setting> Options> Quick Study Default Option in the Procedure Step is set to apply.

5.3 Acquire Image

① Begin study to acquire images.



X You can edit the image acquisition order by selecting the Procedure Step.

5.4 Adjustment



- < Figure 20 Panning & Cropping >
- Panning & Cropping
- Upon clicking the mouse, the ROI area is selected.
- You can resize the area, adjust the location of the image.
- Automatic mode can be set in the Procedure Manager Tool.



< Figure 21 Windowing >

- Windowing
- Adjust the Window Level / Window Width.
- Adjust the Window Level by right-clicking the mouse and moving vertically.
- Adjust the Window Width by right-clicking the mouse and moving horizontally.
- Adjust the brightness and contract by adjusting the Window Level / Window Width.



< Figure 22 Annotation >

- Annotation
- Insert Maker, Text etc. or perform measurement.
- This feature allows to set the User information and Text to be inserted automatically.

5.5 Close Study



< Figure 23 Close Study >

- Upon completion of study, click the Close Study button on the bottom left corner of the screen.
- Terminating a study brings you back to the Worklist screen.
- You can set images to be sent to a designated storage device automatically depending on the study termination option settings.
- Go to System Menu > Setting to set the automatic transmission mode.

5.6 Retake & Recycle



< Figure 24 Retake >

- Click the Retake Image on the bottom left corner if a photo needs to be retaken.
- Send the selected image to the garbage bin and retake the photo.


< Figure 23 Recycle >

- Steps to restore the images temporarily kept in the garbage bin:
- ① Click the Recycle button on the right to open the list.
- ② Select an image.
- ③ Click the Restore button on the left.
- ④ The currently displayed image is swapped with the image selected by clicking the Restore button.

5.7 Reject Image



- Delete the selected Image Acquisition procedure.
- Warning! Take extra caution when executing Reject Image as the image is deleted upon completion of image acquisition.

5.8 Edit Procedure



- Display the Procedure registration window.
- Add or delete a Procedure Step.

5.9 Suspend Study



- Suspend image acquisition and return to the Worklist window.
- If you redo the suspended study, it will be resumed from the last saved point.

5.10 Image Processing





< Figure 26 Image Processing >

- Image Processing Parameters can be changed.
- ① Select "Image Processing Paramters".
- ② Click on "Image Processing".



< Figure 27 Reprocessing >

- ③ Select the Image to be changed.
- ④ Click the "Save" button when finished.



If you check the box on Include Similar Parameter message, Apply all the Parameters of the same bodypart.

6. Studylist

6.1 Studylist Screen Configuration

Worklist	StudyList	Viewer	System Mer	nu 🛱 Setting	🗕 Minimize 🔘 Exit			VX	
Patient ID	Patient Name	Accession	0	08-01-2011 🗸 🧸	08-01-2011 🗸	Today	3 Days	Week	Q
Study Descriptio	n	Any BodyPart	~ A	ny Modality 🗸 🗸	Physician	Month	2 Months		Search
	Date .	(3) ···		Pin in +				
No. Se	nd Study Date	Study Description	Acc. No.	Patient ID	Patient Name				
_									
No. Se	nd Study Date	Study Description	Acc. No.	Patient ID	Hanging Protocol Wizard				
					C				
							X A	•	x X
					+ − € Add Reset Reset All	tana Den			OpenStudy

- < Figure 24 Studylist >
- ① Main screen toggle button and logo

Worklist StudyList Viewer System Menu Console Software for Digital Rudiography System Viewer

- 2 Search
- You can search by : Patient ID, Patient Name, Accession No., Date, Study Description, Status, Body Part, Modality, and Refer. Physician.
- You can set the search by: day, three days, a week, a month, two months, or the entire period available.

Patient ID	Patient Name	Accession No.	2011.06.18 🗸	2011.06.18 🗸	Today		Week	Q
Description		Any BodyPart 🗸 🗸	Any Modality 🗸 🗸	Physician	Month	2 Months		Search

- 3 Main Tools
- Modify study details, Delete study, Move study, Transfer study, Print, Save, CD Burn, Queue
- Perform functions: Backup, Restore, Import, and Extend List.

Ø	×		4	H	3				
	Delete				CD Burn	Queue	Backup	Restore	

	Worklist	StudyList	View	ver Sy	ystem Menu					VX	
Patient	ID	Patient Name	Ac	cession No.	07-19-20	011 🗸	~ 07-19-2011 ~	Today	3 Days	Week	Q
Study D	Description		Any	/ BodyPart	✓ Any Mod	lality ~	Physician	Month	2 Months	All	Search
Edit Info.	× Delete	1 Paste		•• > Send	Print Save As	CD Burn Queue	r≱		LEG	R LAT	
No.	Send	Study Date	Study Descriptio	n Acc. No.		Patient ID	Patient Name		<u>∎Å</u> * 1 -	1	
1	0/1	07-19-2011 15:43:04	ABDOMEN	20110719	1516430390	test3	test3				
2	0/1	07-19-2011 15:42:46	LEG	20110719	1516140671	test2	test2				
3	0/1	07-19-2011 15:41:44	HIP	20110719	1515160546	test1	test1				
4	0/2	07-19-2011 15:33:21	THORAX	20110719	1517040921	Rayence	Rayence				
5	0/4	07-19-2011 15:13:04	THORAX	20110719	1512370281	Rayence	Rayence			~	
										(5)	
										Ŭ	
	_										
No.	Send	Study Date	Study Descriptio	n Acc. No.		Patient ID	Hanging Protocol Wizard				
1	0/2	07-06-2011 21:30:09	ABDOMEN	20110706	2130080843	test2		-			
			0					19			
			(6)					100 A			
							1		T A	_	<u>x</u> %
								der.			
							Add Reset Reset All	Open		N.	OpenStudy

< Figure 29 Studylist >

- ④ Main List
- Displays the list of completed studies.
- 5 Thumbnail List
- Display the list of thumbnails of studies selected from the Main list.
- 6 Reference List
- Display the list of patient's past study selected from the Main list.
- ⑦ Hanging Protocol Wizard
- Compare several studies simultaneously



6.2 Main Tools

6.2.1 Edit Into.



1 2 Select a study you want to modify and click "Edit Info".



2 Modify study details.

	Registration
Patient ID*	Rayence
Patient Name*	Rayence Search
Owner ID	
Owner Name	Search
Birthday	7 ~ 28 ~ 2011 ~
Sex	O v Age 5D
Accession No.	201108011946380250
Study Description	THORAX
Species	CANINE ~
Breed	BEAGLE, ROUGH
Mobile	
Telephone	
Address	
	Modify Cancel

- ③ After editing, press the "Modify" button.
- ④ The modification and updating process will proceed.





① Select a patient you want to delete from the Study List and click "Delete".

Edit Info.	X Delete	Pada	•• > Send	T) Print	Save As	CD Burn	j Queue	A Backup	Restore	F Import	

2 The Delete Confirmation Dialog Box will be popped up.



- YES : Delete the selected study.
- NO : Delete the selected study. (Except for the images yet to be sent)
- Cancel : Cancel deletion.

6.2.3 Paste (Cut & Paste)

	Worklist	StudyList	Viewer	System Menu				ISOLE
Patien	t ID	Patient Name	Accession N	o. 08-02-20	011 ~ 08-02-2	2011 🗸 Today	3 Days Week 🔍	
Study	Description		Any BodyPar	Any Mod	lality V Physici	ian Month	2 Months All Sear	rch
Edit Info.	X	Paste		Seed Print Save As	O i 😁	Restore Import	PELVIS HIP VD	
No.	Send	Study Date	Study Description	Acc. No.	Patient ID	Patient Name	1 - 2	
2	0/1	07-29-2011 17:40:17	LF	201107291740150531	ER20110729-174015	ER20110729-174015	ABDOMEN VD	
3	0/1	07-29-2011 17:40:10	LF	201107291740080343	ER20110729-174008	ER20110729-174008	1 * 4	
4	0/1	07-29-2011 17:40:02	LF	201107291739590484	ER20110729-173959	ER20110729-173959	ABDOMEN LAT	
5	0/1	07-29-2011 17:39:46	LF	201107291739430453	ER20110729-173943	ER20110729-173943	1 - 5	
6	0/1	07-06-2011 21:38:29	LEG	201107062138020656	test5	test5	THORAX LAT	
7		07-06-2011 21:34:49		201108021110090453	Rayence	Rayence	1 - 6	
8	0/1	07-06-2011 21:32:24	THORAX	201108021102570281	Rayence	Rayence		
9	0/2	07-06-2011 21:30:09	ABDOMEN	201108021101260453	Rayence	Rayence		
10	0/2	07-06-2011 21:27:44	HIP	201108021100500765	Rayence	Rayence		
		- 5554 - A2 - A4-040		1. 20				
No.	Send	Study Date	Study Description	Acc. No.	Patient ID Hanging	Protocol Wizard		
1	0/3	08-01-2011 19:46:38	THORAX	201108011946380250	Rayence			
2	0/1	07-06-2011 21:32:24	THORAX	201108021102570281	Rayence			
3	0/2	07-06-2011 21:30:09	ABDOMEN	201108021101260453	Rayence			
4	0/2	07-06-2011 21:27:44	HIP	201108021100500765	Rayence		X A V Y	×
					Add	Reset Reset All Open	OpenS	Study

< Figure 30 Cut & Paste >

- Select the image you want to move from the Thumbnail List
- Click the "Cut" button. 🛛 😽

X Click the Cut button again if you want to cancel the Cut operation.

- Select the Study List you want to move the image to and click "Paste".

) Paste

S	elect Series	
Patient ID ER20110620-110626	Patient Name ER20110620-110626]
Existing Series		
Series No. Description	Series Date	
1 SKULL		
		J
O New Series		
Description ABDOMEN		
	OK Cancel	
Existing Series		
- Add it to the existing series.		

- New Series
- Create a new series. -

..>

6.2.4 Send • Send the selected study.

Erit Info Delete

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E O i E + + +

_		Multi Send	
Storag	ge Server		
	AETitle	Address	Port
×	XMARUVIEWACQ	127.0.0.1	104
	STORESCP1	192.168.10.100	104
✓	STORESCP2	192.168.10.200	104
×	BACKUP	192.168.10.20	3000
Sand	Mada		
Send	 Selected Study 	Selected	Image
		Send	Cancel

- Storage Server
- Storage Server are registered in the list sent to select an item. (Multi selectable)
- Send Mode
- Selected Study : Send all images in selected study.
- Selected Image : Send the selected images.



6.2.5 Print

• Print the selected study to the DICOM Printer.

Edit Info. Delete				, € Seid Print	Save As CD Burn Queue	Backup Restore Import
		Printer	Manager			
Drinter List		3	Print Informatio	on		
AE Title	Host Address	Port Numt	Media Types	CLEAR FI	LM 🗸 Destinatio	n PROCESSOR 🗸
PRINTSCP	127.0.0.1	104	Magnification	BILINEAR	 Priority 	MED ~
			Orientation	PORTRAI	T 🗸 Film Size	8INX10IN ~
			Cropping	CROP	 ✓ Trim 	NO ~
			Resolution	STANDAR	RD V	🗹 True Size
		4	Density			
			Max	163	Min	0
			Border	BLACK	 Empty 	BLACK ~
		(5	Overlay			
			🗹 Image	Information	n 💌	Annotations
		(6	Print Mode			
) Sele	ected Study	C	Selected Image
		(Print Layout		8	Number of Copies
Add	Edit Delete	Echo	Col 1	✓ Ro	w 1 ~	Copies 1 -
					9 Print	Cancel

- ① Printer List : List of connected printers.
- ② Add : Add a printer.

Edit : Edit an existing printer on the list. Delete : Delete a printer on the list.

Echo : Check the connection on the printer.

③ Print Information

Medium Types : Choose Film Type.

Destination : Select the properties.

Magnification : Choose magnification properties.

Priority : Select a priority.

Orientation : Select the image orientation. (landscape, portrait)

Film Size : Select the size of the film.

Cropping : Select the Crop option.

Trim : Turn On/Off Trim function.

Resolution : Select the Resolution.

④ Density

Max : Select the Maximum value.

Min : Select the Minimum value.

Border : Select border options.

Empty : Select the Margin color.

5 Overlay

Image Information : Including image information is printed.

Annotation : Including Annotation data is printed.

6 Print Mode

Selected Study : Print all images in selected study.

Selected Image : Print the selected image.

- ⑦ Print Layout : Select the layout.
- (8) Number of Copies

9 Print & cancel



• Save the selected study as another image file. (jpeg, png, etc)

Save Dath	ĺ.			
Saveradi				
File Format	JPEG (*.jpg)		~	
-		Selected Stud	iy	Cancel
		Selected Stud	iy	Cancel

• Burn the selected study in a CD-Rom (Viewer software included)

L × 1 a Litti trita. Delete Futer Sem	d Print	Save As	G B B m	i Queue	e Backup	Restore	import		
--	---------	---------	------------	------------	-------------	---------	--------	--	--



X Disk (Folder): Save the study into a portable hard disk or user-defined path (Viewer included)



6.2.8 Queue



• Show the transmission status of study.

L X 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

	Study Queue											
1	Studi	ies : 3	Images : 9									
		Туре	Waiting Images	Patient ID	Patient Name	AETitle						
	~	SEND	3	999999999	Rayence	XMARUVIEWACQ						
		SEND	3	999999999	Rayence	STORESCP1						
(3	SEND	3	9999999 999999 999999 999999 999999 9999	Rayence	BACKUP						
		Refresh	Adort	AD	ort All Retr	7 Close						

- ① It shows the number of all studies and images that are currently being transmitted.
- ② It shows the list currently being transmitted.
- ③ Refresh : refresh and update the list.
- ④ Abort : abort transmission of the selected study.

(The study whose transmission has already been started may not be canceled even if it is deleted from the list)

(5) Abort All : abort all operations that are currently registered.

(The study whose transmission has already been started may not be canceled although it is deleted from the list)

- 6 Retry : retry transmission.
- ⑦ Close : close the Study Queue window.

6.2.9 Backup & Restore



Back up or restore the selected study into the user-defined path.



< Figure 25 Import >



- Select Folder : retrieve images from the selected folder.
- Select File : retrieve the selected image.

6.2.11 Extend List

Edit Info	X Delete	Faste					•• > ∉ Send Pr	int Save As	CD Burn Qu	i 💭	Restore	E II Impert
	Worklist	StudyList	Viewer	System	Menu						V	
Rayer	nce	Patient Name	Accession No		06-03-2011	v ~	08-02-2011	~	Today	3 Days	Week	
Study	/ Description		Any BodyPart	~	Any Modality	¥	Physician		Month	2 Months		Search
Edit Info	D. Delete	Paste OpenStudy					•• > (Send Pri	int Save As	CD Burn Qu	eue Backup	r:: .::↓ Restore	import 4
No.	Send	Study Date	Study Description	Acc. No.		Patient ID		Patient Name		Owner ID		Owner Name
1	0/3	08-01-2011 19:46:38	THORAX	2011080119463	80250	Rayence		Rayence				
2		07-06-2011 21:34:49	HIP	2011080211100	90453	Rayence		Rayence				
3	0/1	07-06-2011 21:32:24	THORAX	2011080211025	70281	Rayence		Rayence				
4	0/2	07-06-2011 21:30:09	ABDOMEN	2011080211012	60453	Rayence		Rayence				
5	0/2	07-06-2011 21:27:44	HIP	2011080211005	00765	Rayence		Rayence				
										1		
No.	Send	Study Date	Study Description	Acc. No.		Patient ID		Patient Name		Hanging P	rotocol Wiz	ard H -
1	0/3	08-01-2011 19:46:38	THORAX	2011080119463	80250	Rayence		Rayence				
2	0/1	07-06-2011 21:32:24	THURAX	2011080211025	/0281	Rayence		Rayence				
3	0/2	07-06-2011 21:30:09	ARDOMEN	2011080211012	60453	Rayence		Rayence				
4	0/2	07-06-2011 21:27:44	HIP	2011080211005	00765	кауепсе		кауепсе				
										+ Add	Reset R	も teset All Open

• Close the thumbnail list to extend the main list.

< Figure 32 Extend Mode >

6.3 Hanging Protocol Wizard



• Compare all selected studies on a single screen.

6.3.1 Layout



- Determine the layout of the Hanging Protocol Wizard.
- Support the format of 1 x 1, 2 x 1, 1 x 2, and 2 x 2.

6.3.2 Register and Cancel Hanging Protocol Wizard

Hanging	Protocol	Wizard	• 🖽
		96	
-		1	
		-	1s
Add	Reset	Reset All	Open

- Add : Move the study selected from the main list into the Hanging Protocol Wizard.
- Reset : cancel the operation of selected study.
- Reset All : cancel the operation on all studies.
- Open : open and execute the Hanging Protocol Wizard.



< Figure 33 Hanging Protocol Wizard 2X2 Layout >



< Figure 34 Hanging Protocol Wizard 1X1 Layout >



Double-click the top Title bar to switch back to 1x1 layout.

7. Viewer



7.1 Viewer Screen Configuration

< Figure 35 Viewer Screen >

- ① Main screen toggle button
- ② Patient Information
 - Show the patient information.



- ③ Thumbnail List
- ④ Main Tools

•



- 5 Title Bar
- 6 Main Screen
- ⑦ Status Bar
 - Display the storage connection status, HDD capacity, and queue.
- (8) Side Tool Bar

7.2 Side Tool Bar

7.2.1 Image



- Previous Page
 - Move to the previous page.
- Next Page
 - Move to the next page.
- Previous Image
 - Move to the previous image.
- Next Image
 - Move to the next image.

7.2.2 Study Layouts



7.2.3 Image Layouts



※ Extend Button : Extension Tool Bar

Layout		×	۲	lmag	e Layouts	
			<	Viev	v Controls	
				dr ⊂		
	Fdit		<	Imag	je Control	
	Luit		12	CN A		
• 2 x 3	3 x 2	3 >	x 3	3 x 4		
• 4 x 3	4 x 4	4 >	k 2	2 x 4		
					RAYENC	E Co., Ltd.

- Tool Bar Edit
 - 1 Click the Edit button on Extension Tool Bar.



② The currently selected button is marked in yellow.



③ Select the desired layout.

④ Click the Apply button.



(5) The selected layouts are now in the toolbar.



7.2.4 View Controls



- Select
 - Basic Configuration Cursor

R

- Select Functional button, Maker, Annotation, Cropping area etc.



- Move the center of the selected image.

- Zoom
 - Resize an image.
- Magnify



- Display the Magnify Glass.
- Hold the "Shift" key and move the mouse to adjust magnification.
- Hold the "Ctrl" key and move the mouse to adjust the size of the magnifying area.
- ※ Extend Button : Extension Tool Bar



- Resize an image according to the size of the Main Screen.

7.2.5 Image Control



- CW 90°
- Rotate an image by 90 degrees clockwise.
- CCW 90°
- Rotate an image by 90 degrees counterclockwise.
- Flip Vertical
- Flip an image vertically.
- Flip Horizontal 📂
- Flip an image horizontally.

※ Extend Button : Extension Tool Bar



• Invert



- Invert an image between black and white.

• Cropping



- Crop the area to be sent.(Only Capture Mode)
- This feature is used in Image Capture Mode only.
- Reset
- Reset and initialize the Image Control.

7.2.6 Annotation



- Length
- Measure the distance between two points.



- Measure the angle.
- ROI Rectangle



- Set the rectangular ROI.
- ROI Ellipse
- Set the circular ROI.
- Arrow
- Enter the arrow.

- R Marker – R •
- Enter the Marker R.
- L Marker – L •
- Enter the Marker L.
- Т Marker – Text
- Enter the user-specific text. -
- ※ Extend Button : Extension Tool Bar

Annotation X	<	li	mage C	ontrol
$\boxed{Aa} \stackrel{\text{\tiny RLL}}{\swarrow} \stackrel{\text{\tiny RLL}}{\swarrow} \stackrel{\text{\tiny RLL}}{\boxtimes}$	12	2		
	<		Anno	tation
Z		∠	ROI	
PRE DEFINE 🗸	K	L	R	Τ
	<			Tools
W 1638			¢.	T
Edit				
Overlay (Show & Hide)				

Select either Show or Hide for Main Screen Overlay Text.

Aa

- X Delete
- Delete the selected Annotation.
- ALL) Delete All •
- Delete all annotations of the image displayed on the screen. -

• Predefine Text

PRE DEFINE	
SUPINE	
UP	
DOWN	
PRE DEFINE	~

- Enter the predefined text.

Go to System Menu > Setting > General > Display > Pre-Defined Text if you want to edit

the predefine text.

• Center Mass Line



- Enter the center mass Line.
- Vertical Length
- Measure the vertical length from the entered parallel line.
- Acetabular Angle



- Measure the acetabular angle on both sides.
- Cobb's Angle



- Measure the Cobb's angle.
- Extended Cobb's 5 Line



- Measure the Cobb's angle of five lines.
- Extended Cobb's 8 Line



- Measure the Cobb's angle of 8 lines.

7.2.7 Tools



- Save As
- Save the selected image under a different file name.
- Print
- Print the selected image to the DICOM Printer.

i

- Send
- Send the selected image.
- Stitching
- Stitch two or three images into one.
- ※ Extend Button : Extension Tool Bar

Tools X		K	
TH T	۲		Tools
			F
Edit			
Reset All			

- Reset and initialize all image processing.
- DICOM Header View
- Display the DICOM header information for the selected image.

H

•

• Modify Exposure Parameter



- Modify exposure parameters of selected image.



- Write the radiology report. This icon will be show in the client mode.

8. System Menu

8.1 Setting



8.2 Minimize



1 Minimize : minimize the VetView window.

8.3 Exit



① Exit : show the exit confirmation dialog box of VetView.



- I. Yes : terminate the VetView program.
- II. No : cancel terminating the VetView program.

9. CD Viewer

Automatically runs viewer when you insert the CD.
 (If you do not automatically, click the CDViewer shotcut icon.)



< Figure 36 CD Viewer Study List >

	Carla Insider Carla Insider	Our Hospital 1) NOTICE 1 2) NOTICE 2 3) NOTICE 3 4) NOTICE 4					
1 🐼 View	r Image 🛛 🖉 🔽	Minimize	3 🗽	Close Study		Exit	
No Patient N	ame Patient ID	ę	Study Descriptio	on	Study Date	Study Time	Moda.
1 Rayence	Rayence	THORAXLAT	_		2011-08-01	19:46:38	DX
			5				
							×

- ① View Image : Image review.
- ② Minimize : Window minimized.
- ③ Close Study : Close the study list.
- ④ Exit : Exit CD Viewer.
- ⑤ Study List : Displays studylist included on the CD.



< Figure 37 CD Viewer >

- ① Main Tool Bar
- Study List Open



- Next / Previous Study Open
- Image Layout
- Select, Invert Image, Reset


- Zoom Image, Panning, Magnify, Fit
- Rotate / Flip Image
- Length, Angle, Rectangle / Circle ROI
- Delete Annotation, Delete All Annotation
- Export Image, Copy Clipboard

 - ② Main Screen
 - ③ Thumbnail List











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Appendix

1. Client Mode

1.1 What is Client Mode?

VetView is support basically Console Mode of the image acquisition and processing,

and Client Mode of Review.

Client Mode review and read images obtained in the x-ray room from the reading room,

doctor's office and other areas.

1.2 Start Client Mode

• Execute the icon of Launch VetView Client in Background.



< Figure 36 Client Mode Log-in >

• Excuted the Client Mode Log-in window.

- Enter the Password.(Default Password : 1234)
- Excuted the Client Mode.

StudyList	Viewer	System Menu			Console Sol	tware for Digital Radiogra	ohy System.	
Patient ID	Patient Name	Accession No.	09-05-2011 ~	~ 09-05-2011 ~	Today	3 Days	Week	Q
Study Description		Any BodyPart V	Any Modality ~	Physician	Month	2 Months		Search
Edit Info. Delete Poste		e Prin	nt Save As CD Burn Queue	ren en ♥ en enre Import	•			
No. Study Date	Study Description	Acc. No.	Patient ID	Patient Name	Owner ID			
					_			
					_			
No. Study Date	Study Description	Acc. No.	Patient ID	Hanging Protocol Wizard	H۲			
						T A	~	× %
				+ - O Add Reset Reset All	Copen			OpenStudy

< Figure 37 Client Mode >

1.3 Functions of Client Mode



< Figure 38 Client Mode Viewer >

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- All functions of the Client Mode are the same viewer function and the Studylist of console Mode.
- Detail function of the Viewer and Studylist are refer to the Chapter 6 Studylist and Chapter 7 Viewer.

1.4 Client Mode Setting

		Setting	×
🖞 General 🔺	Store SCP		
Account	AE Title		
System	Port	0	
Header Column	Tort		
Annotation	Database		
Options	DB Folder	C:\Rayence\VetView\Client\Database	
💂 Network 🔺			
ACQ			
Obout			
		Apply	Close

- All functions except ACQ items are the same as the Console Mode.
- Store SCP : Enter the AE Title and Port of VetView Client.
- Database : Set up the path of database folder.





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