VidiView R4 - Release brief R4.8

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Summary

Another important release of our medical image management eco system VidiView has been released! VidiView R4.8 – successor of R4.7 released back in November 2019. The focus in the R4.8 release revolves around

- [General] Quality improvements on all levels
- [Feature] External photography module
- [Feature] New study features in the VidiView Controller
- [Maintenance] A new and improved configuration tool for the server
- [Maintenance] A new eco system configuration model
- [General] Preparation for the future!

Detailed information on major updates

[General] Quality improvements – on all levels

To deliver the functionality and continuity our customers demand from a solution like VidiView, we've spent a lot of time and efforts in an overall, general quality improvement program during the R4.8 development process.

When we speak of quality - we address several areas, such as;

- **Design robustness** is the design robust enough to deliver the functionality under real use-case circumstances?
- Design fitness if the design fit to address or solve a specific need or problem?
- **Design test-ability** to what extent is this design testable, and what does the result of these tests tell us?
- Architectural fitness is the architecture suitable for the product or function?
- Performance fitness does the design and architecture deliver the performance we need?

By addressing the above questions, we learn about shortcomings and lack of quality in our product and can effectively address it. Such an assessment should be done on a regular basis but is – due to lack of development resources, sometimes downvoted or downgrade. Feature development is simply more fun, more rewarding and more challenging from an engineering perspective.

This time around we choose to do this work – resulting in many improvements and optimizations. Most does not meet the eye – all improve the general outcome of long-term usage!



[Feature] External photography module

To better facilitate special needs for photography with external camera equipment such as Canon EOScameras we've developed a new module for these use cases. Using the VidiView Client application and a connected Canon EOS camera you can control and use the camera from the client-application.

Images are stored directly in the application (not in the camera memory card) and the images are put directly into an examination prepared with patient and exam data. The result is a safe and controlled workflow where superior image quality is paired with superb safety and effectiveness.

The use case with professional photography equipment is common within

- Dentistry and oral surgery
- Colposcopy
- Microscopy
- Various skin conditions (dermatology)
- Plastic surgery





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[Feature] New examination features in the VidiView Controller

Two new asked-for features for the VidiView Controller module are a **timer-function during** examinations and a **confidentiality mode for the worklist**. Here you are!



The new timer function is basically a digital stop watch for timing certain part of an examination. A press on the button activates a timer at the top of the screen. Another press stops the timer. Yet another press resets and restarts the timer. Plain and simple – and very often asked for!



The worklist confidentiality mode is used to hide the worklist, otherwise displayed on the VidiView Controller before examination start. The worklist contains patient data and could under certain circumstances be visible to the patient. To minimize the risk of patient data exposure this feature can be used. The mode is turned on/off at using the button below the worklist.



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[Maintenance] A new and improved configuration tool for the server

With the release of R4.8 we introduce an updated design for the VidiView Server Configuration Tool. This update is partly to address logistic and logical shortcomings in the old configuration tool where the order of which the config options was displayed was no longer logical. Partly to address the introduction of the new confirmation framework model (more on this update in the next topic).

🚳 VidiView R4 Server Configur	ation Tool			_		×
Configuration pages						
Status	Status					
🏀 Status						
Healthcare enterprise	VidiView Server service status					
Organization			1			
\rm User management	Server version	4.8.1 (development preview)	Check for updates			
🐚 Healthcare data	Service state	Running (uptime 00 days, 00h 25m)				
Server settings	Service logon account	NT AUTHORITY\NetworkService				
General		Stop Service Restart Service	Specify maintenance message			
Uatabase and storage		· · · · · · · · · · · · · · · · · · ·				
Security External services	Current activity					
Built-in services			1			
🐮 External applications	Network connections	U% of sessions, U% of calls (U calls/s)	<u>Open Performance Monitor</u>			
8 Patient	Video streams	Live = 0, Playback = 0				
	Study locks	Read = 0, Write = 0, Contribution = 0				
Windows firewall						
VidiView modules	Computer information					
WebView	OS Version	Windows Server 2016 - NET Framework V4.7.	03062			
VidiView Capture	Computer name	test2	Open System Properties			
	Active Directory membership	ADVV]			
	Computer IP	89.236.46.11 2001:7a0:8002:100::658	Open Network Connections			
		fe80::452:3294:e3d4.fe80%2 (link local)				
		×				
	Mac address	B8:AC:6F:89:87:50				
	Deview and New and	- All Hin	1	C (- C	-
	Frevious page Next pag	e Ai settings	l	Save C	onfiguratio	л
License serial: 7938506966	(demo) O Service: Running	Database: Connected as ADVV\Adminis	trator Script level: 541			

The new config tool design is arranged in for sections.

- Status general status of the server
- Healthcare enterprise your enterprises data (users, departments and diagnostic meta-data)
- Server settings all settings unique for this server
- VidiView modules your modules in the eco system (such as clients, web-viewers and capture units)

We feel these sections better represent the configuration flow for most users of the system.



	Previous page Next page All settings	Save Configuration	
-			
License serial: 7938506966	(demo) Service: Running Database: <u>Connected as ADVV\Administrator</u> Script level: 541	.::	

Apart from the new sections, we've moved down some relevant information in the bottom-bar of the window. License, service state, database connection information and database version is displayed here.

	Previous page Next page	All settings		Save Configuration
License serial: 7938506966	(demo) O Service: Running Databa	ase: <u>Connected as ADVV\A</u> d	ministrator 🛛 🖉 Script level: 541	.::

We also introduced a new config section called 'All settings'. This new section is accessed though the 'All settings'-button at the bottom of the config tool GUI. Please see next topic for more information).

Part of these changes are made in an attempt to prepare the product, the eco system and the system administrators for the coming update to VidIView R5 and the maintaiance model of the new generation.

[Maintenance] A new eco system configuration model

The VidiView eco system is already very customizable and flexible. The product is design to fit anything from a small "4-room endoscopy clinic" to an "enterprise wide, 5 hospitals, 25 rooms each plus mobile documentation" type of setup. This is one of the biggest strengths of the product and eco system.

To meet new demands from customer already using the eco system extensively, we've modeled, designed and implemented a new model for configuration. This model is a multi-tier, very flexible configuration model which allows for every detail of the system to be tailored to exact needs.

This is mainly accomplished by the use of a matrix-type of config model where a default value for everything is configured in the server settings. Later overrides can be configured for a specific config parameter, based on

😫 VidiView Settings repository	-		\times
Search			
Server / Service / Authentication / Application SSU / SectraSharedSecret			
Server / Service / Authentication / ApplicationSSO / TakeCareSharedSecret			^
Server / Service / Authentication / Controller / Accent By Default True			
Server / Service / Authentication / VidiView / Enabled True			
Server / Service / Authentication / VidiView / MaxPasswordAge 180 days			
Server / Service / Authentication / VidiView / MinPasswordLength 4 chars			
Server / Service / Authentication / X509 / CertificateRevocationCheck Offline			
Server / Service / Authentication / X509 / Enabled True			
Server / Service / Authentication / X509 / SmartCard Reinsert RequirePin 15 minutes			
Server / Service / Authentication / X509 / SmartCardRemovalPolicy Lock VidiView Client			
Server / Service / Authentication / X509 / TrustedIssuers "FC6FB340A84D5B3643D13AB38B6360634CA3D67FICN	TEST SI	THS eid P	er
Server / Service / Authentication / X509 / UserMapping Windows Active Directory			
Server / Service / Authorization / RoleProvider / CustomLibraryPath C:\Program Files\Distributed Medical\Vidi/View Server\Exte	nsions\Vic	diView.Auth	nor
Server / Service / Authorization / RoleProvider / Enabled False			
Server / Service / MaxPlaybackStreams 100			
Server / Service / ThrottleDownloadRate 0 MBit/s			
Server / Service / ThrottleUploadRate 0 MBit/s			
System / Patient / Formatting / PatientId {Id}			
System / Patient / Formatting / Patient.ld / Pseudonymized {Patient.BirthDate.yyyy}>ooox>ooox			
System / Patient / Formatting / PatientName {Name.Given} {Name.Family}			- 1
System / Patient / Formatting / PatientName / Pseudonymized Patient {Patient {Patient.PersonName.Given}			
System / Patient / ManualCreate / AssigningAuthorityId			
System / Patient / Pdq / CustomLibraryPath			
System / Patient / Pdq / Enabled False			
System / Patient / Pdq / ServiceHost			
System / Patient / Pdq / Type HL7 service provider			
WebProxy / Address			
WebProxy / Password			
WebProxy / UseProxy Do not use			
WebProxy / Username			
WebView / Enable False			
WebView / UseDefaultCertificate True			
Workflow / DicomCStoreSCP / AllowOverwrite False			
Workflow / DicomCStoreSCP / Enabled False			
Workflow / DicomCStoreSCP / LocalAETitle			
Workflow / DicomCStore SCP / MaxAssociations 64			
Wilden / Dimecol			



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-,	Client / UI / Popup / Co	onfirmPatientRelationOnChangeDepartment
	Determines if a popup is Department Role provid	displayed to the user when changing departments. Requires the er to be active
efault value	No	~
alue overrides:		Note! Overrides take precedence in the following order
Department	astrology2	Confirm when displaying other than home $\varepsilon \smallsetminus $

- Department
- User
- User group
- Role

This will enable the configuration of the system to meet very specific scenarios – not possible in earlier versions of the system.

This change, however small it may appear, is groundbreaking for the product and relies on a new API model between all components of the system to function.

It is our belief that this change will enable asked-for flexibility when it comes to configuration in large and enterprise-wide deployments.

[General] Preparation for the future!

Since late 2019 we have designed a new architecture, planned and evaluated new technologies within our domain, examined and mapped current and predicted future customer needs and tried to forecast future imaging tech trends in the medical field.

All of these activities have been conducted in an effort to plan for and make up a foundation for the next generation of VidiView - VidiView R5.

Parallel with this work a regulatory preparation for the new EU directive MDR (Medical Device Directive) has been made. Whatever work and effort put into the R5 project needs to be in line with MDR. A complex and sometimes unknown territory – yet to be release into the wild by the European Union and the corresponding national authorities.

What to expect in the coming release of VidiView?

In the first release of the new generation R5 we plan to introduce the following features

- Working with multiple studies of the same patient in parallel in a better, more convenient way making way for effective collaboration between client applications
- P-i-P view in the client application during conferencing
- Further development in the anatomy (body) mapping toolkit

The current, overall focus for the product development is heading towards user collaboration, specific workflow support and usability.

