



Release Notes –Version 5.5.1

MODALIZER+, 12 February 2020

Summary

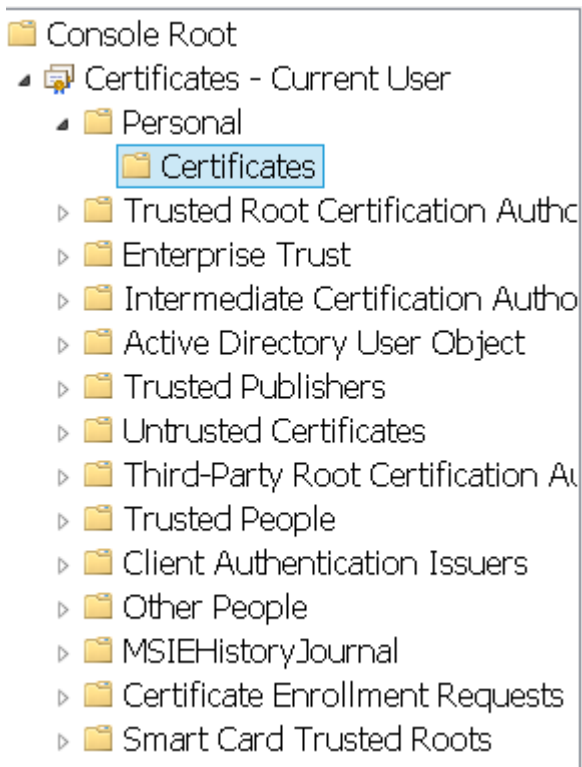
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New features	
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90	"Show header" in the Viewer does not display empty sequences
103	On first opening of Settings screen "Expanded" icon is not shown on Storage servers and Worklist servers captions
155	Conversion fails for PDF with odd length



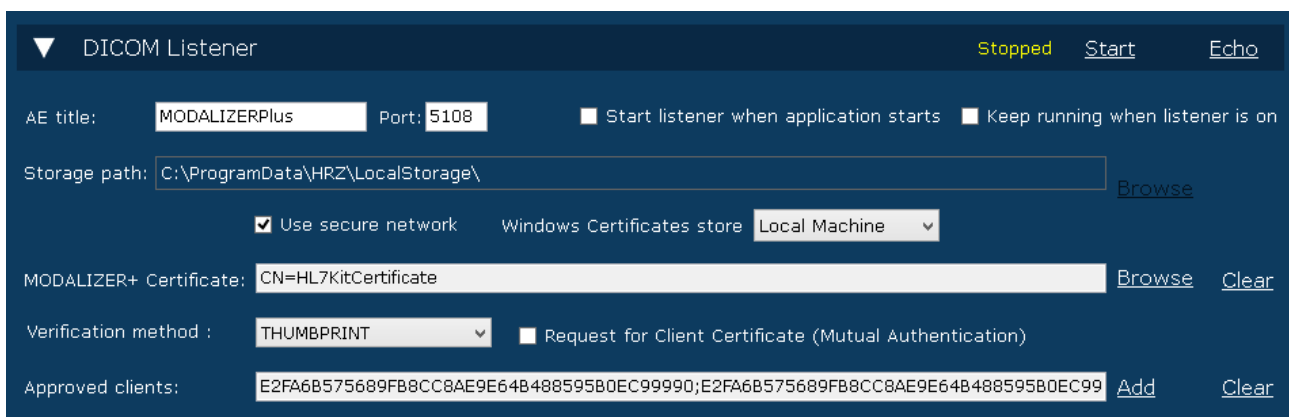
Detailed Release Notes

54 - TLS (Transport Layer Security) Secure DICOM Networking

Certificates from Windows store can be used for secured DICOM connections to PACS. Application can use certificates from Local Machine or Current User location (see Microsoft Management Console):



MODALIZER+ internal Listener definitions:










Checkbox "Use secure network" - if selected enable DICOM TLS Network Security Layer

"Windows Certificate store" area - select required store (Local Machine or Current User)



"MODALIZER+ Certificate" area - click "Browse" to select certificate that identifies MODALIZER+ from Windows store:

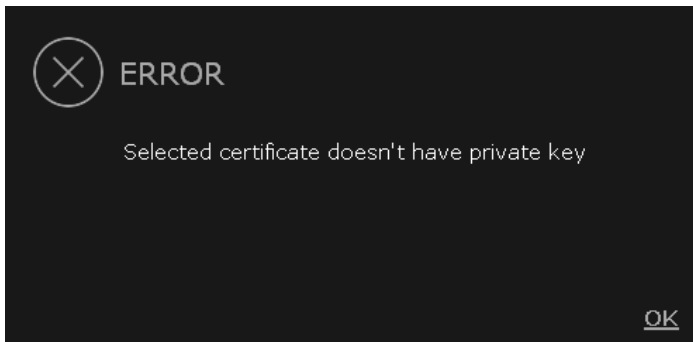
Select certificate
Please check that certificate has private key

-  Issuer: Go Daddy Root Certificate Authority - G2
Valid From: 03/05/2011 to 03/05/2031
[Click here to view certificate properties](#)
-  Go Daddy Root Certificate Authority - G2
Issuer: Go Daddy Class 2 Certification Authority
Valid From: 01/01/2014 to 30/05/2031
-  MySslClientCertificate
Issuer: MySslClientCertificate
Valid From: 01/01/2015 to 01/01/2025
-  HRZ Software Services LTD
Issuer: Go Daddy Secure Certificate Authority - G2
Valid From: 23/11/2016 to 21/11/2017
-  HL7KitCertificate
Issuer: HL7KitCertificate
Valid From: 26/07/2018 to 26/07/2019
-  NVIDIA GameStream Server
Issuer: NVIDIA GameStream Server
Valid From: 08/03/2019 to 08/03/2039
-  IIS Express Development Certificate
Issuer: localhost
Valid From: 19/08/2018 to 19/08/2023

OK Cancel



If user selects certificate which doesn't have private key, next message will be shown and certificate will not be selected:



Click "Clear" to remove selected certificate from settings.

List "Verification method" - allows to select one of the three options for verification of the other party certificate:

NONE: No verification - Any certificate is accepted

TRUST CHAIN: Use certificates chain of trust. A certificate is accepted if it passes the verification of the operating system by using wincrypt API. See <https://docs.microsoft.com/en-us/windows/win32/api/wincrypt/nf-wincrypt-certverifycertificatechainpolicy>

THUMBPRINT: Look-up the peer certificate thumbprint in the list defined in "Approved clients" textbox

Checkbox "Request for Client Certificate (Mutual Authentication)" - when set to true the server will request from the client to provide a certificate. When set to false, the client may or may not provide a certificate and it will not be verified

Click "Add" to insert thumbnail in pop-up screen, click "Clear" to remove ALL client thumbnails.

Storage Servers and Worklist Servers settings



MODALIZERPlus

Remote AE: MODALIZERPlus

Remote host: localhost Remote port: 5108

Description: sssss

Automatic MPPS: Storage server: [dropdown]

Secure network: Windows Certificates store: Current User [dropdown]

Local AE Certificate Subject Name: CN=MySslClientCertificate [Browse] [Clear]

Verification method: THUMBPRINT [dropdown]

Remote AE Certificates: E2FA6B575689FB8CC8AE9E64B488595B0EC9999C [Add] [Clear]

[Echo] [Cancel] [Save]

"Windows Certificate store" area - select required store (Local Machine or Current User)

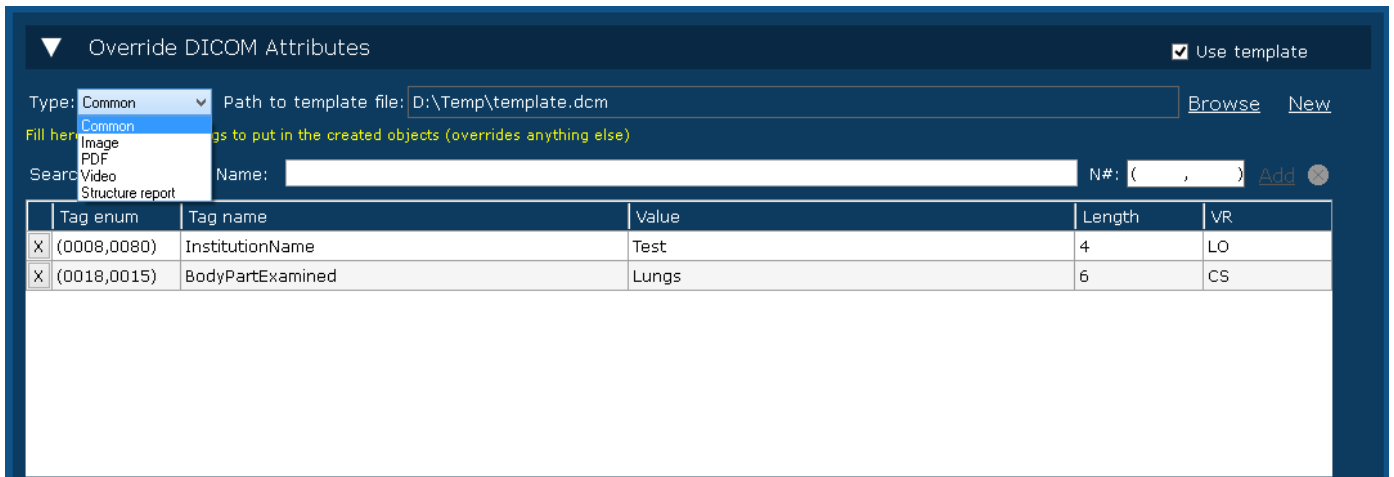
Local AE Certificate (optional - user don't have to select certificate. Not all servers require it) - click "Browse" to select local certificate from Windows store. Click "Clear" to remove selected local certificate. This certificate verifies MODALIZER+ identity. The remote AE may request for this (mutual authentication)

Verification Method and Remote AE Certificates (optional - user don't have to select certificate. If not defined MODALIZER+ will not verify the server certificate explicitly) - see description in the Listener section.

88 - Multiple templates for overriding of the DICOM attributes in converted files

Application allows to define not only one template common to all converted DICOM files, but also specific templates for each type of such files.

There is combo box "Type" in "Override" section:

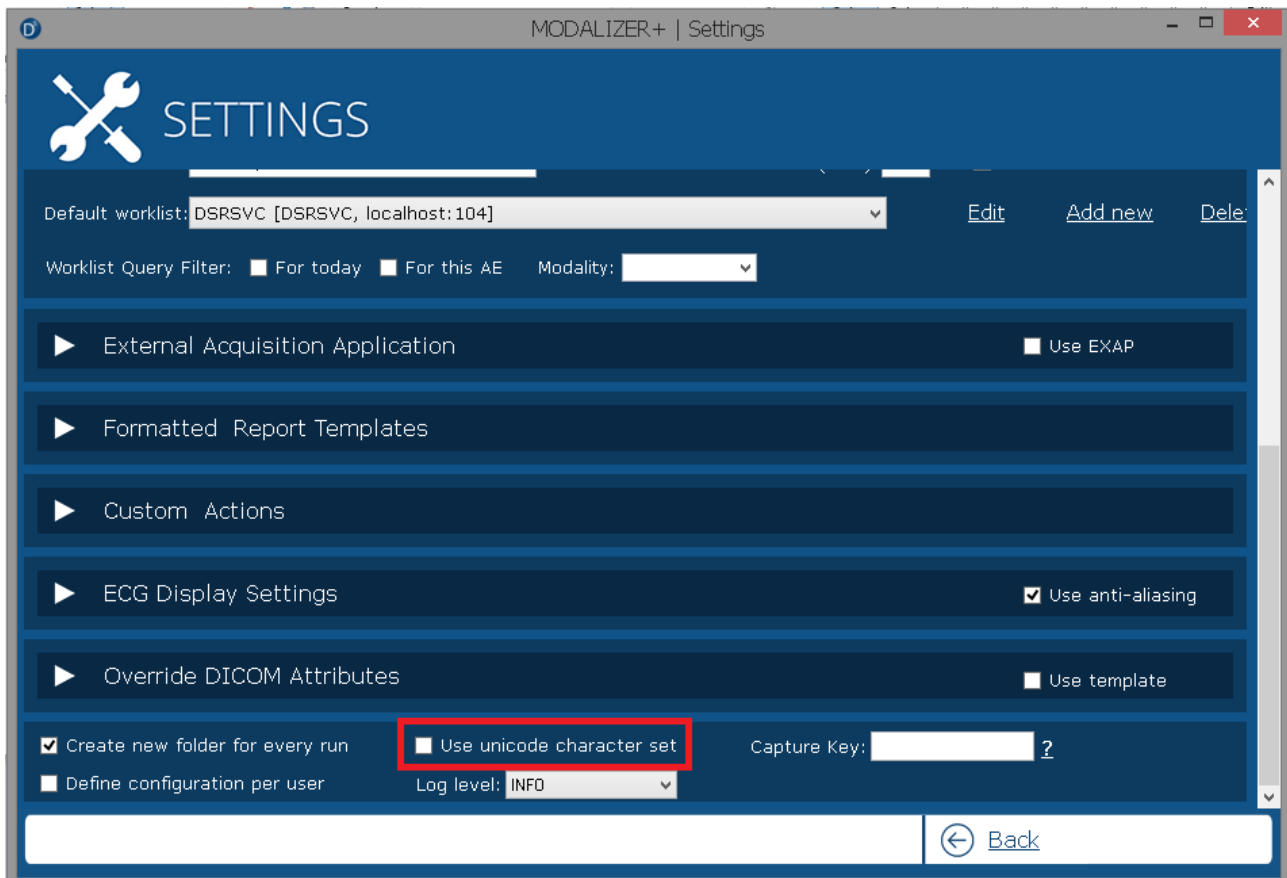


"Common" template (if defined) will be inserted into each converted DICOM file.

There are also four other types: Image, PDF, Video and Structure Report templates which will be inserted only to relevant files.

Any of the files can be created/selected separately.

105 - Support of the Unicode character set



Values of "String" tags (Value Representation SH, LO, ST, LT, UT, PN) will be inserted encoded as Unicode.



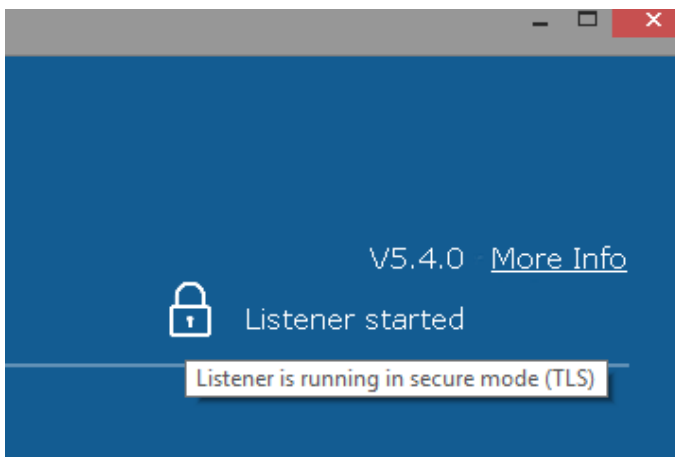
87 - Internal Data Base in use for Local Archive and History of the Viewer changed from Compact DB to SQLite

To eliminate permissions problems.

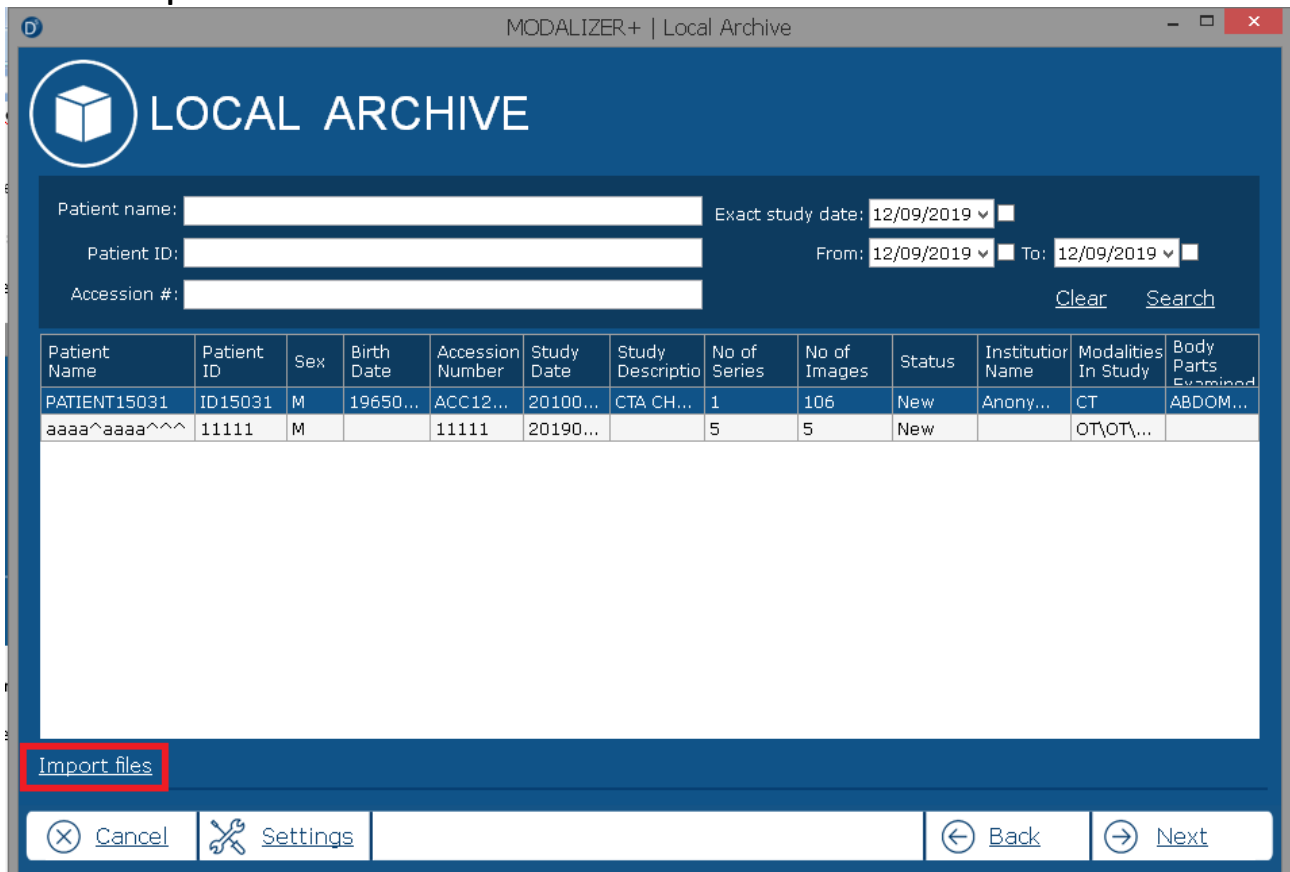
SQLite DB file MODALIZERDB.db positioned in %ProgramData%\HRZ\MODALIZERPLUS folder

100 - Add Listener indication on main screen

Text "Listener started" and icon to display security mode (secured/not-secured) with tooltip:



107 - Add Import files action to Local Archive Screen





109 - Add C-GET SCU Functionality to the MODALIZER DICOM Q/R SCU

Storage Servers Settings section allows selection between using C-MOVE and C-GET. The user can select which of the commands to use for retrieving the instances.

The screenshot shows the 'DSRSVC' configuration window. The 'Retrieve method' dropdown menu is highlighted with a red box, showing the following options: C-MOVE, C-MOVE, and C-GET. Other fields include Remote AE (DSRSVC), Remote host (localhost), Description (DSRSVC), and Secure network options (Local Machine, Current User).

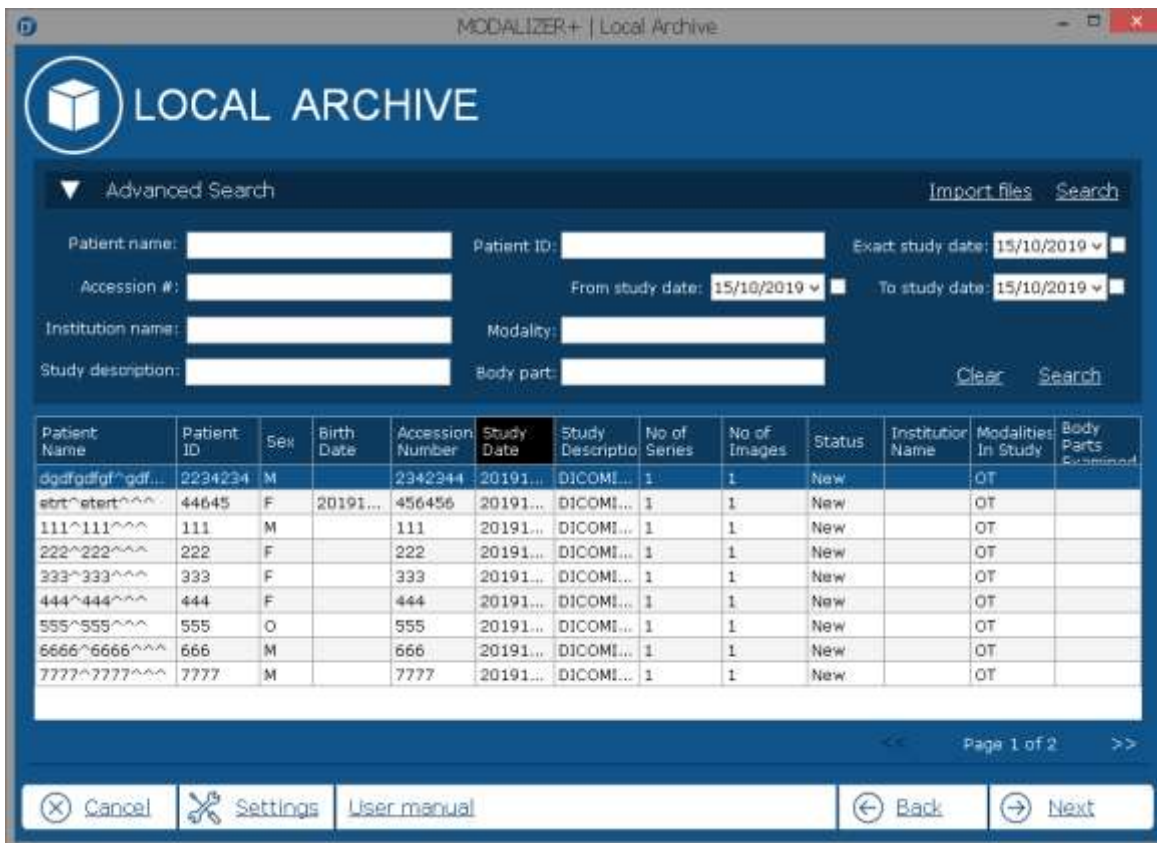
114 - Local Archive screen improvements

Expander like in Query Retrieve screen has been added to the screen. This expander contains new search fields (modality, study description etc.).

Default sorting of the result grid is by study date descending

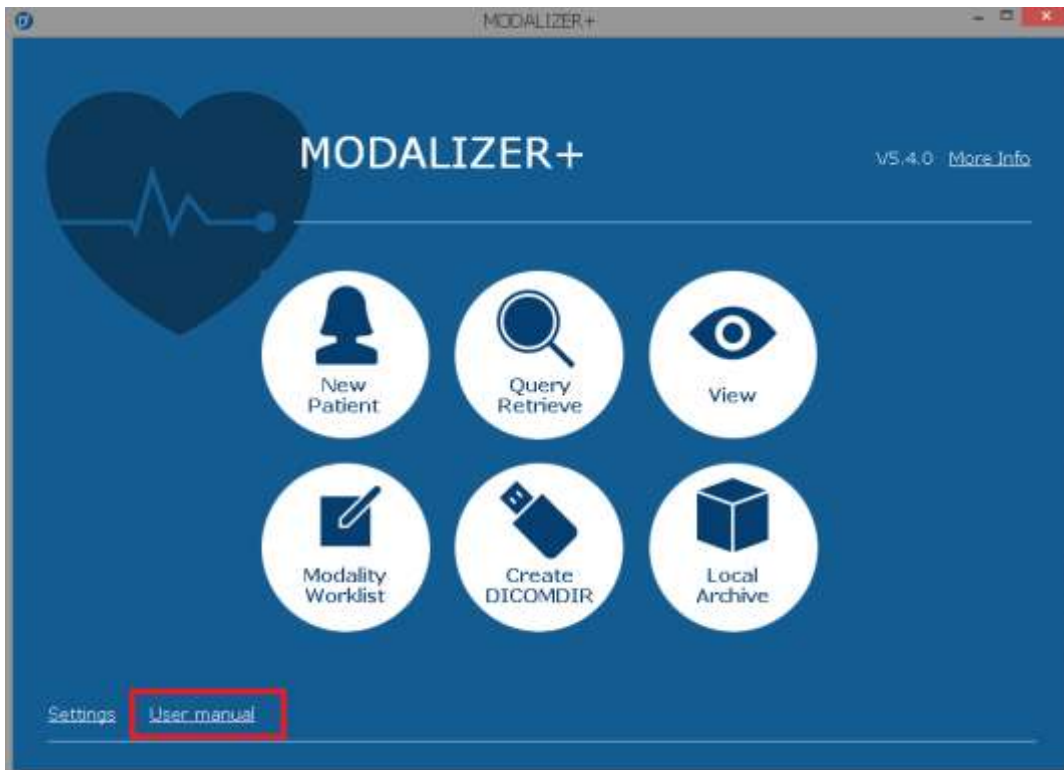
The screenshot shows the 'LOCAL ARCHIVE' screen with an 'Advanced Search' section. The search results table is as follows:

Patient Name	Patient ID	Sex	Birth Date	Accession Number	Study Date	Study Describio	No of Series	No of Images	Status	Institution Name	Modalities In Study	Body Parts Examined
dgdgfg^gf^gdf...	2234234	M		2342344	20191...	DICOMI...	1	1	New		OT	
ebt^etert^...	44645	F	20191...	456456	20191...	DICOMI...	1	1	New		OT	
111^111^...	111	M		111	20191...	DICOMI...	1	1	New		OT	
222^222^...	222	F		222	20191...	DICOMI...	1	1	New		OT	
333^333^...	333	F		333	20191...	DICOMI...	1	1	New		OT	
444^444^...	444	F		444	20191...	DICOMI...	1	1	New		OT	
555^555^...	555	O		555	20191...	DICOMI...	1	1	New		OT	
6666^6666^...	666	M		666	20191...	DICOMI...	1	1	New		OT	
7777^7777^...	7777	M		7777	20191...	DICOMI...	1	1	New		OT	
8888^8888^...	888	M		88888	20191...	DICOMI...	1	1	New		OT	
999^999^...	999	F		999	20191...	DICOMI...	1	1	New		OT	
fghfg^fghg^...	345345...	F	20191...	345345...	20191...	DICOMI...	1	1	New		OT	
dfgdgfdg^dgd...	345345...	M		3535435	20191...	DICOMI...	1	1	New		OT	
fghg^dhfgh^...	45353	O		3453535	20191...	DICOMI...	1	1	New		OT	



117 - Add user manual to the setup

User manual can be opened in the external PDF Viewer from any place of the application. From the menu screen:



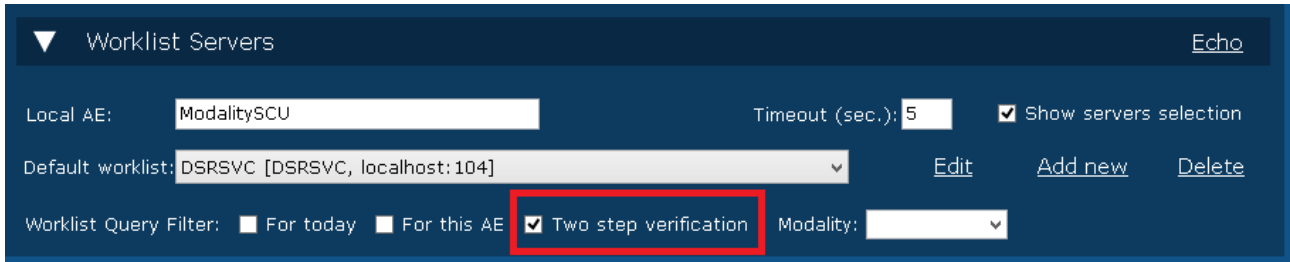


From any other screen:



122 - Two step verification in MWL

There is "Two step verification" checkbox on the "Worklist Servers" section of the settings screen:



If this option is selected (by default its value is true) - all the data from the selected MWL entry will be displayed in a popup modal windows before starting the procedure:

