

NEW FEATURES AND BUG FIXES

iQ-ROUTER

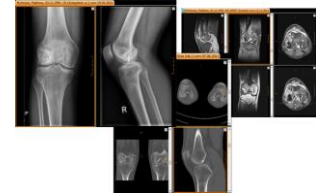
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NEW FEATURES

- Automatic prefetching

Save time by letting iQ-ROUTER search for you for relevant previous studies of a patient and automatically send them to the workstation whenever data is sent through iQ-ROUTER. In addition, you can use various filters to define what you consider a relevant study.



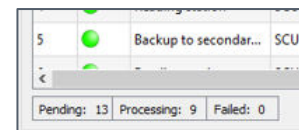
- Performance improvements

Time is money and in medicine it can also mean saving lives. With this version, faster transmission speeds can be achieved when sending many small images to iQ-ROUTER over the network. This means that you now have to wait less time before you can start working. For example, sending 850 uncompressed CT images over the network to iQ-ROUTER took about 28 seconds in version 4; with version 5 it just takes around 17 seconds.



- Better overview of the status of forward jobs

New counters in the user interface of iQ-ROUTER Monitor now inform you directly about the amount of pending, processing, or failed forward jobs.



The list above only contains the most important and/or interesting new features. For complete description of all features and functions of the software, refer to the instructions for use.

BUGFIXES

- ✓ Fixed schedule for forward jobs not being used properly, when iQ-ROUTER is stopped and only restarted after the last scheduled time window
- ✓ Fixed the issue that C-ECHO requests sent in Router Configurator did not apply SSL/TLS settings correctly
- ✓ Fixed "Ping" command in Router Configurator failing with "Hop limit exceeded" error for certain types of hosts

REMOVED

- × Nothing was removed in this version.

NEW FEATURES

- Redesigned forwarding system:

All DICOM forwarding jobs are now stored in a local SQL database making it possible to restart iQ-ROUTER without losing any jobs. Successfully transferred jobs will be deleted from the database immediately. Non-transferred jobs are deleted after a customizable time frame (default: 30 days). Please make sure to adjust log file settings according to your legal requirements.



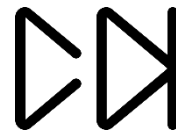
Forwarding jobs are now displayed in a clear and filterable table, so you can see which jobs are being sent, which ones are pending and resend or delete non-transferred jobs.



With the option for delayed forwarding of jobs it is now possible to let iQ-ROUTER collect jobs and forward them later within a customizable time frame.



Slow forwarding jobs could reduce the whole system performance in previous versions. Now you can limit the number of associations per destination AE title which helps to ensure that sufficient resources are available for other forwarding jobs, so that the full performance can be used for all jobs.



- Improved user interface

The improved user interface of iQ-ROUTER allows you an easier navigation as well as more control and monitoring capabilities.



- Enhanced support for networks with limited bandwidths

Further configuration options make it possible to ensure that transfers will not result in timeouts in such environments, e.g. socket send timeout, socket receive timeout, connection timeout.



- Improved throughput scaling

The limit of allowed simultaneous associations was 100 in previous versions. You can now increase it up to 1000 associations. We recommend one CPU core per 10 simultaneous associations (The default value is still 25).



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BUGFIXES

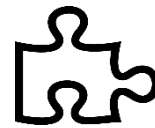
- ✓ iQ-ROUTER will now continue to work if it cannot connect to the license server
- ✓ Fixed an issue where iQ-ROUTER would not start in case no network adapter could be found
- ✓ Resolved the issue that pinging a modality was always successful
- ✓ Fixed an issue where the wrong SOP Instance UID was used in DICOM communication when a lossy compression was applied and a new UID was generated during the compression
- ✓ It is possible now to enter hostnames with special characters (e.g. "-")
- ✓ Fixed an issue where it was not possible to enter all characters that are valid for an AET
- ✓ Labels are now completely visible

REMOVED

- ✗ Removed advanced RLE settings
- ✗ Removed support for several outdated cipher suites
- ✗ Removed outdated advanced JPEG-LS compression options

NEW FEATURES

- Windows Server 2019 support
Install and run iQ-ROUTER, iQ-ROUTER PRO and iQ-ROUTER PREMIUM on the Standard edition of this latest available server operating system.
- More workflow options by connecting additional software plug-ins
There is a piece of the puzzle missing for your perfect workflow? A router interface allows you to connect further plug-ins that add even more functionality to the already plentiful features. For example, extend your workflow to include patient reconciliation on the basis of Worklist queries that are performed automatically to match the patient/study information of transferred data with data already existent in those systems. In contrast to earlier versions, you can now use plug-ins with all editions – from basic iQ-ROUTER to iQ-ROUTER PREMIUM, giving you all the flexibility you need. These plug-ins are not part of the router setup but are deployed separately. Contact your local reseller for details on available options and a quote that matches your expectations.
- Sending DICOM images without further compression or decompression
Use the new option of disabling the transfer syntax conversion to forward data passing through iQ-ROUTER/PRO/PREMIUM with the same compression as received. This can speed up the transfer and avoid issues with transfer syntaxes not supported by the application.



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BUGFIXES

- ✓ Fixed bug preventing the router to properly decompress JPEG 2000 images
Checking for a specific string in a DICOM attribute affected by a configured attribute rule previously failed when the tag was empty, which meant that the rule was not applied. The router will now successfully check the empty tag and perform the data modification.

- × Removed official support for outdated operating systems
*On January 14, 2020, Microsoft will end support for **Windows Server 2008 R2** and **Windows 7**. That means the end of regular security updates and, therefore, a high risk of subjecting your systems to cyber security vulnerabilities. With iQ-ROUTER/PRO/ PREMIUM being a central node for the distribution of imaging data within the medical network with connections to all kinds of other stations (PACS, modalities, reading stations etc.), it is important to keep the system on which the application runs secure and up-to-date. As such, we, too, cease to support iQ-ROUTER/PRO/PREMIUM installations on these end-of-life operating systems in all medical networks.*

NEW FEATURES

- Three editions – your choice

While previously access to specific features could only be obtained by purchasing a higher edition of iQ-ROUTER (PRO or PREMIUM), version 3.0 lets users of the basic edition benefit also from advanced features such as forwarding and attribute manipulation. The three editions primarily differ regarding the extent to which the various functionalities are available.

Choose the edition that best fits the size and conditions of the medical network you intend to use iQ-ROUTER in, basically depending on the number of stations you need to connect and the number of specific adjustments you plan to implement.

For all details concerning the edition limitations (e.g. number of allowed AEs), see the user documentation. This is especially important for users who plan to update from a previous software version. You may have to switch to a different edition.



- Performance enhancements

Radiological studies get always bigger. Large multi-frame objects create transfer issues due to increased memory needs. iQ-ROUTER is now a 64-bit application, which especially improves the transfer and (de)compression of large datasets.



- Making data transfer safer by improving SSL security

In order to provide the latest security updates, the OpenSSL version of iQ-ROUTER has been updated from 1.0.0c to 1.0.2p. This update also adds support for the TLS versions 1.1 and 1.2. All passwords are stored in an encrypted way and no longer shown in plain text when entered into the password fields.



- Option for centralized license management

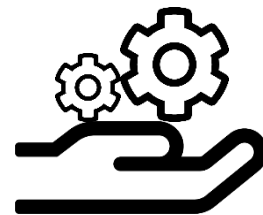
Use one Concurrent Server to easily manage the licenses for all iQ-ROUTER installations in a network. Save time and overhead by choosing concurrent (i.e. floating) licenses instead of a computer-based licensing model.



- Easier handling of iQ-ROUTER service restarts after configuration changes

After changing the iQ-ROUTER configuration, the application's service must be restarted for the changes to take effect. Previously, this had to be done manually in the Windows Services console.

Save time and be sure that a restart is really performed, by completing this action directly from within the iQ-ROUTER configuration interface.



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BUGFIXES

- ✓ Fixed bug preventing the iQ-ROUTER service from starting
- ✓ AE mapping is now also applied to forward rules
- ✓ Resolved crash when trying to send data with an SOP Instance UID exceeding the maximum length (e.g. due to attribute manipulation rules)
- ✓ A modality hostname starting with a number is no longer identified as IP address when editing the modality again
- ✓ Forwarding rules now appropriately use the selected condition logic ("AND" or "OR")
- ✓ Fixed invalid default forward storage folder
- ✓ Images with Icon Image Sequence (0088,0200) attributes can now be compressed

REMOVED

- × No plugins available with version 3.0
The setup of version 3.0 will not include any of the plugins that had been available for previous iQ-ROUTER PREMIUM versions. Plugins used with current installations of iQ-ROUTER PREMIUM will not function after an upgrade to version 3.0. Required plugins will become available again with some future version.
- × Removed Private Wavelet compression
When upgrading from previous versions, where Private Wavelet transfer syntax was configured, the configuration will automatically be modified to use JPEG-LS instead which is approx. 10x faster than the obsolete Private Wavelet compression.
- × Removed "Allow multiple forwards" option



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