

BRiCare

Remote Support: We take care of your instrument, while you focus on your business



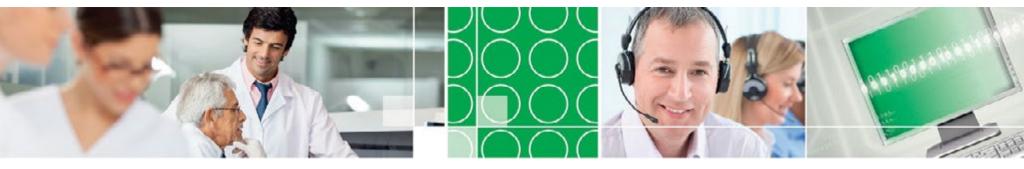
ABOUT

Bio-Rad Remote Support Services BRiCare

Sit back and concentrate on your business while Bio-Rad experts take care of your instruments.

BRiCare is Bio-Rad Laboratories well established application that allows remote support of your instruments.

Using secure technologies, BRiCare constantly monitors the status of your systems and can respond proactively to keep them running at peak performance. Our Field Engineers and Application Specialists are available on-line to provide ideal support to your lab so you can deliver optimum results.



BENEFITS

Thanks to BRiCare Proactive Monitoring Functions:

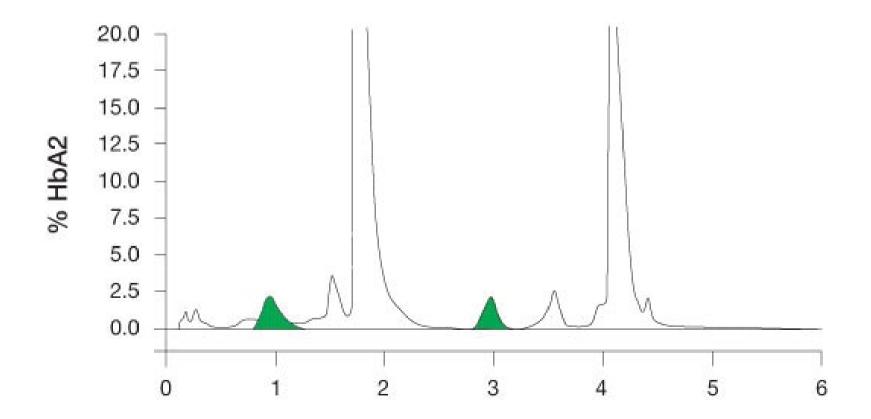
- The reliability of your instrument and your confidence in the system will increase. We can remotely troubleshoot problems and solve them even without a visit.
- Your productivity and sample throughput will be maximized. Collecting true instrument data, BRiCare helps reduce troubleshooting time and allows preventive maintenance, resulting in increased instrument uptime.
- The need for you to be involved in service calls to describe problems is reduced, freeing up your resources as we solve the current issue.
- An automatic notification can alert our Specialists and Engineers of machine malfunctions even before you are "aware of them".



BENEFITS

Thanks to BRiCare secure remote support options:

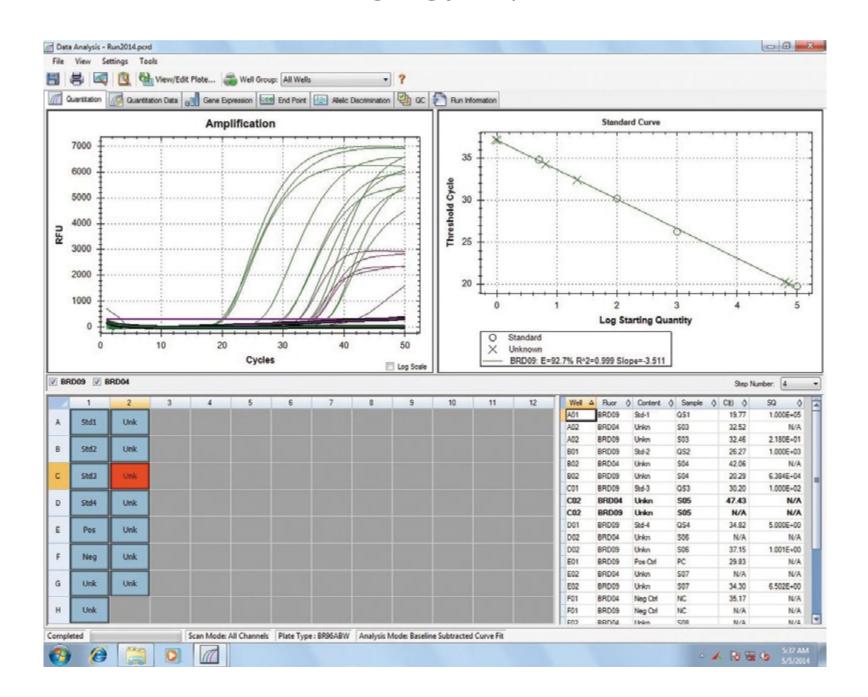
No more time wasted trying to understand if a problematic result is sample specific or a problem with the instrument's performance: **there is always an expert, whose skills you can rely on,** providing you individual real time support on your system and on your data.

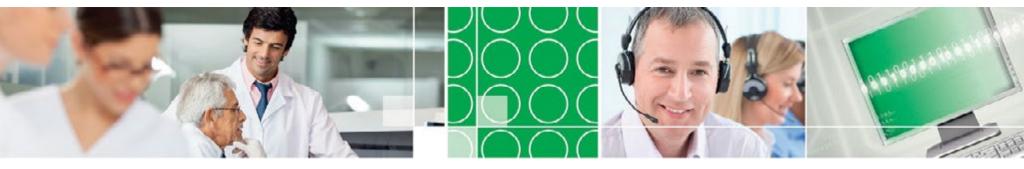




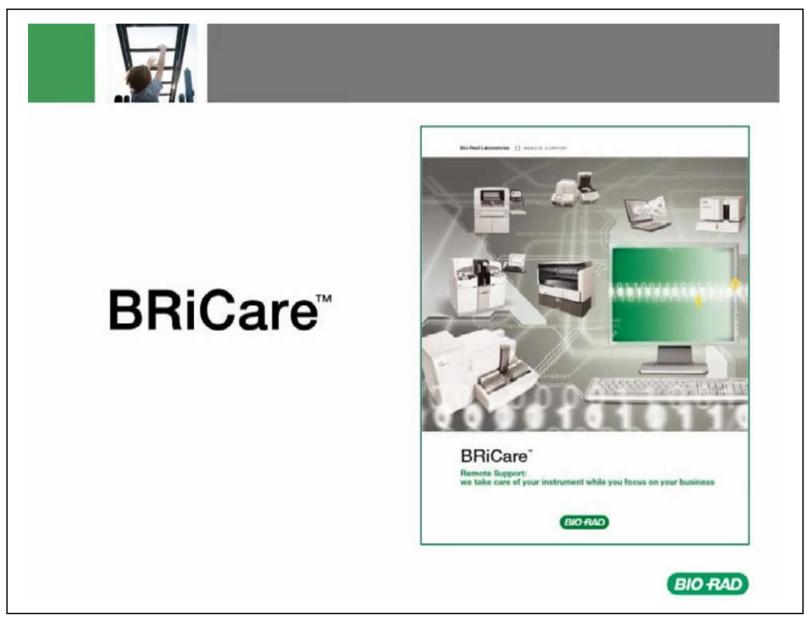
BENEFITS

Even if your lab experiences frequent staff turnover or rotating operators, **we can easily and efficiently deliver remote training at your convenience.** With specialists available online we can assist in designing your protocols for best results.



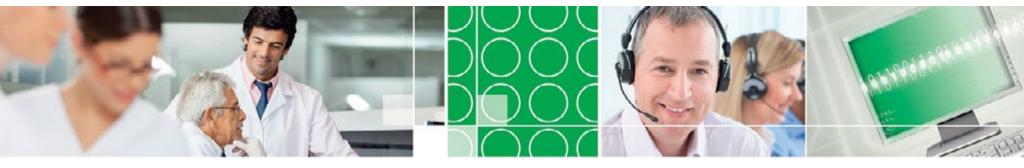


BENEFITS



Click screen to start video.

To view online: https://youtu.be/GMAWJD0dYGY



THE CONCEPT

Two powerful tools for support

BRiCare provides two powerful tools for state-of-the-art instrument support:

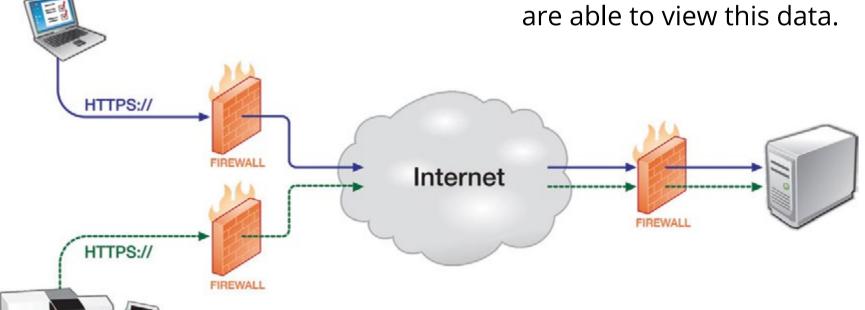
Tool 1: Continuous Monitoring of the Instrument's Computer

The BRiCare applet that is installed on the instrument computer periodically collects instrument and operating system data. No patient data is collected. The collected data is securely sent to the central BRiCare server for use by authorized Bio-Rad personnel. Data can be sent without interfering with the normal laboratory workflow and without operator intervention.



THE CONCEPT Bio-Rad users login to the BRiCare server. All data is highly encrypted using "VeriSign" EV SSL certificate (256 bit) and securely transferred via port 443 (HTTPS) to the IM server.

The BRiCare server accepts data only from authorized BRiCare agents. This data is securely saved in the BRiCare server. Only authorized Bio-Rad users are able to view this data.



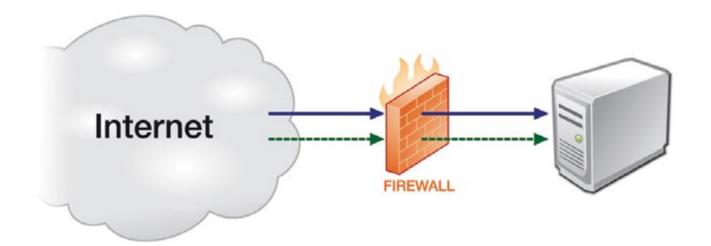
One way communication only: all the communication to the BRiCare server is initiated by the BRiCare agent. All data is highly encrypted using "VeriSign" EV SSL certificate (256 bit) and securely transferred via port 443 (HTTPS) to the BRiCare server.



THE CONCEPT

Tool 2: Remote Sessions with the Instrument Computer

With customer approval, authorized Bio-Rad support personnel can view and take control of the instrument computer. This can be used for troubleshooting, software configuration, or for introducing the customer to new or infrequently used features. Bio-Rad support can also ask the operator to navigate to a software or computer screen of interest. With customer approval, the support person can see a screen shot of just this screen, without taking control of the system.



The BRiCare servers are responsible for establishing a "proxy" connection between the instrument and Bio-Rad's user. There is no direct connection to the BRiCare applet.



SECURITY & PRIVACY

Security is of prime importance



Click screen to start video.

To view online: https://youtu.be/6Jdr8YnT9yU



SECURITY & PRIVACY

BRiCare has been designed with security of prime importance.

- It collects and transmits only instrument data, never any identifiable sample result or data.
- All data transmissions are outbound, highly encrypted, via HTTPS (443) port.
- Uses "VeriSign" Secure Site Pro with Extended Validation SSL certificate.
- Full authentication and authorization.
- Customer can disable the monitoring activities and stop support sessions at any time.
- All remote sessions are visible to the user at all times.



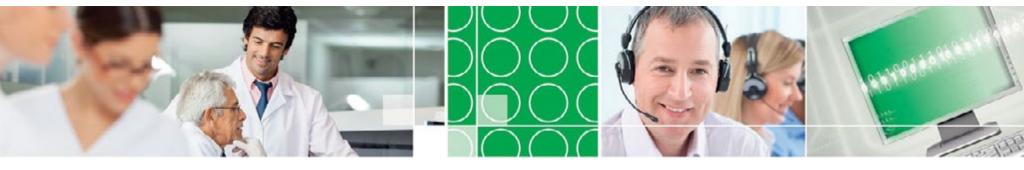
SECURITY & PRIVACY

BRiCare Security and Privacy Statement

Ensuring the security and privacy of your data is of the utmost importance. The BRiCare application uses numerous measures to ensure the highest level of security and privacy.

This statement is intended to provide you with a summary of the security measures implemented in BRiCare and our security and privacy policy. This statement provides information of the security layers that are implemented in BRiCare.

BRiCare utilizes some of the most advanced technology for Internet security available today. We use industry-standard HTTPS (SSL) VPN security technologies to protect data transfer. The VeriSign Extended Validation Certificate (RSA 2048 bit) is used to ensure complete authentication, verifies Bio-Rad Laboratories as the authorized owner of the website and provides daily malware scans of the site. In addition, BRiCare is



SECURITY & PRIVACY

hosted in a secure server environment that uses firewall, antivirus and other advanced technologies to prevent interference or access from outside intruders.

The BRiCare applet was developed based on the Secure Development Life Cycle (SDLC) methodology. Data transmissions from the applet to the server are initiated only by the applet (outbound only) and highly encrypted using VeriSign SSL (port 443). No personally identifiable information (PII) is sent. Once the data is transmitted to the BRiCare secure server it is deleted from the applet computer.

The minimal footprint applet is designed not to interfere with the computer operation.

Remote sessions are initiated by Bio-Rad authorized personnel and all sessions must be approved by the customer. Remote sessions are visible in real time to the customer and can be terminated at any time. All remote sessions are highly encrypted (AES 256bit), authenticated and fully audited. All file



SECURITY & PRIVACY

transfers use encryption and SSL technology to ensure the integrity of the data. A detailed audit log is available for each remote session, on the customer's computer.

Bio-Rad is committed to respect confidentiality of customer's and patient's data and never disclose or forward such information.

BRiCare undergoes frequent security related inspections and risk assessment by a leading security company. BRiCare and its underlying infrastructures and components have been successfully designed and tested to meet the requirements of the CLSI standard for "Remote access to Clinical Laboratory Diagnostic Devices via the Internet". These requirements are also appropriate to ensure security for devices used in other applications.



SPECIFICATIONS

Minimum computer requirements for BRiCare applet installation:

Memory: 1 GB or higher

Hard Drives:

- Large Files instruments : 20GB and up on the Applet installation drive
- Other instruments: 1GB and up on the Applet installation drive **Browser:** Internet Explorer 7.0 or 8.0 (in Compatible Mode)

Operating System:

- Windows 7 Professional, 32-bit or 64-bit UAC Off or On (See Appendix B.)
- Windows Embedded Standard 7
- Windows XP Professional with Service Pack 3 or higher
- Operating systems that are supported **with previous** applet versions:
 - Windows 2000 Professional with Service Pack 4 (BRiCare 1.8 and higher applet versions)

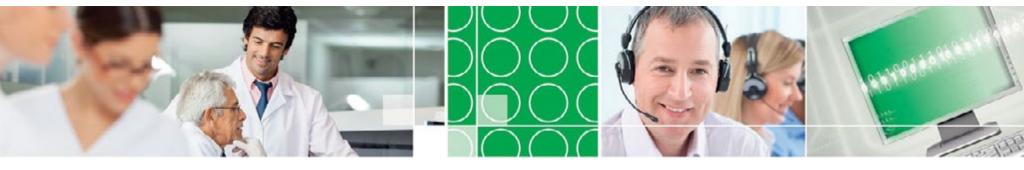


SPECIFICATIONS

Windows NT (BRiCare 1.6 and higher applet versions. To install BRiCare applet on Windows NT 4.0 with Service Pack 6a and High Encryption Pack, please download a previous applet version.)

Required SW products: Microsoft .NET Framework 2.0 (for applet 1.8 and up)

Bandwidth: Download: less than 100 MB a day; Upload: Average of 2 MB a day (value may vary according to instrument type)



FAQs

Frequently Asked Questions

What is BRiCare?

BRiCare is Bio-Rad Laboratories well established application that allows remote support of your instruments. Using secure technologies BRiCare constantly monitors the status of your systems and can respond proactively to keep them running at peak performance. Our Field Engineers and Application Specialists are available on-line to provide support to your lab so you can deliver optimum results.

How does BRiCare work?

A small software application that is installed on the instrument PC, periodically sends encrypted instrument data securely to our servers. The data is available to authorized Bio-Rad employees for monitoring and troubleshooting purposes.

What type of data is transmitted by BRiCare?

Protecting privacy and confidentiality of your data is our



FAQs

priority. Therefore BRiCare only collects instrument diagnostic data, typically including hardware status, component expiration date, software versions, error logs, instrument configuration settings, and other useful instrument metrics. BRiCare never collects sensitive data such as application results, Personal Identifiable Information (PII), patient results or patient data.

How is Bio-Rad employees' access to data controlled?

Only Bio-Rad employees or approved partners can access the BRiCare application through a strictly regulated and managed process. Connection to instruments is strictly limited to individuals with proper permissions, managed by regional administrators to ensure that only authorized individuals have access.

Does Bio-Rad provide the connection between the instruments and the BRiCare servers for data transmission?

No, BRiCare uses the secure https protocol to send encrypted instrument data to our servers. This is an internet connection



FAQs

through port 443 and it should be provided by the lab network.

Will I need to setup BRiCare myself?

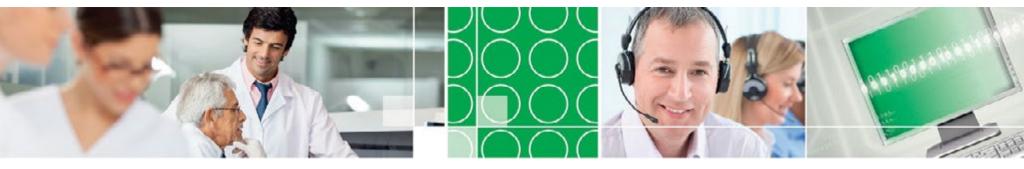
No. Bio-Rad support personnel take care of BRiCare installation.

Can BRiCare activities interfere with my lab network security?

For BRiCare protecting your security is a must. Therefore BRiCare is compatible with all technologies currently protecting your lab network. Bio-Rad IT experts will discuss the BRiCare setup with your facility IT supervisors with respect to your security and protection strategies with no risk to your secure network.

Is the BRiCare application secure?

BRiCare is designed to include all available, state of the art secure technologies. Additional security layers such as firewall software or device can be provided where required.



FAQs

Is there any proof that BRiCare is secure?

BRiCare uses Symantec (VeriSign's) secure EV SSL certificate that also provides daily malware scans to our servers. A monthly report is available indicating the level of security of our site. This VeriSign certificate is used to assess that Bio-Rad is the owner of the web application used by Bio-Rad employees to provide troubleshooting. Furthermore BRiCare infrastructure and code undergo annual external audits and penetration testing from a 3rd party company that issues a security certificate and report. Contact us to obtain more details on our security measures and certificates.

Can BRiCare activities interfere with the instruments' performance?

Not at all. The BRiCare small software application always runs at below normal priority level. Before release, each new applet is tested on instruments, during normal and stress condition to ensure it is safe for use with the specified instrument.



FAQs

How can BRiCare prove useful to my lab?

- Many issues with instruments can be resolved remotely using BRiCare and in case a visit is still needed, the support personnel get enough information in advance to successfully fix the problem on the first visit.
- Support Specialists can help you design and maintain your methods and protocols remotely, reducing costs and times for these activities.
- Proactive monitoring features will reduce significantly unscheduled downtimes preventing problems before they occur.
- Remote training courses and refreshers on less used functions can easily be performed remotely.

Can you initiate a remote session without my permission?

No. BRiCare is configured to initiate a remote session only with your approval. Bio-Rad personnel are instructed to call you



FAQs

before each remote session to inform you about the incoming connection request. If you need Bio-Rad personnel to access your machines automatically, please contact us.

Can I or my IT track all connections to the instrument computer?

Yes. A full audit log of remote connections is saved on the computer on which BRiCare is installed. The log is available for audit at any time. Bio-Rad personnel can also print and send you a report for each remote session performed. Both track the supporter's name(s), time stamp(s) and duration of the support session(s).

What is proactive monitoring?

Proactive monitoring is the capability of BRiCare to use the logs and troubleshooting files from your instruments and analyze the data to make accurate predictions on possible future failures. These trigger notifications to Bio-Rad support teams to check and repair the instruments before a serious malfunction occurs.



FAQs

What are the benefits of monitoring activities?

Since instrument and hardware readings are constantly transmitted to our servers, the support and service teams may discover problems even before the instrument experiences a serious fault.

Will Bio-Rad call me if a problem is detected on my instruments?

Yes. Thanks to proactive and predictive capabilities of BRiCare, selected and specific instrument parameters are checked and any deviation from normal behavior raises a flag to service personnel in order to plan interventions accordingly. Nonetheless, you should contact your local Bio-Rad service representative immediately if you notice hardware, software, or assay issues since not all errors can be controlled in a proactive or predictive way.



ORDERING & CONTACT US Ordering Information

Almost all Bio-Rad instruments are supported by BRiCare. For more details please contact your local Bio-Rad sales representative.

Ordering information

Catalog No.: 2000050 Description: BRiCare Software

BRiCare is a trademark of Bio-Rad Laboratories in some jurisdictions.



ORDERING & CONTACT US

For further information

Please contact the Bio-Rad office nearest you or visit our website at www.bio-rad.com

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