



# Security for BeckmanConnect Remote Support

#### Overview

BeckmanConnect Remote Support is customer installable on any Beckman Coulter networked instrument controller PC with access to permitted network endpoints and on which the customer has administrator access.

Features of BeckmanConnect Remote Support include

- Notifications of system configuration issues or instrument performance/failures
- Customer-initiated remote support via a policy and access-restricted customized version of TeamViewer
- Check for new available upgrades to BeckmanConnect to install new features

This document provides information about the security features of BeckmanConnect Remote Support.

## Components

#### TeamViewer Client (---)



A customized, access-restricted, and policy-secured TeamViewer installation that permits remote support for a system only to local Beckman Coulter support representatives after the connection is initiated and approved by the laboratory technician. TeamViewer runs as a service and has a shortcut available within the operating systems. The client is configured to always run and communicates with the TeamViewer servers.

### Notification Client <a></a>



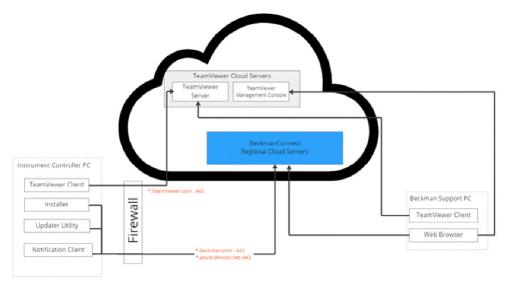
A software service that provides real-time notifications to the instrument controller PC regarding software and instrument status, and logs active system notifications.

## BeckmanConnect upgrade utility 🍧



A software service that monitors for software updates to the BeckmanConnect components and notifies users when an upgrade is available for installation.

# **System Architecture**



# Security Overview

## **Software Component Security**

|                               | Notification Client Updater Installer   | TeamViewer Client Installer                             |
|-------------------------------|---|---|
| In Transit Encryption         | SSL/TLS 1.2   | AES 256-bit session encryption                          |
| Authentication                | Unique AES 256-bit encrypted keys for each device   | RSA 4096-bit Keys for sessions                          |
| Destination<br>Firewall Rules | Beckman cloud servers Outbound: *.beckman.com:443 (outside China) *.azure-devices.net:443 (outside China) *.mybeckman.cn:443 (China) *.azure-devices.cn:443 (China) | TeamViewer cloud servers Outbound: *.teamviewer.com:443 |
| Code Signing                  | Digicert  |   |

## **Server Security**

|                                | Beckman Servers   | TeamViewer Servers  |
|--------------------------------|---|---|
| Data Transmitted and<br>Stored | Enrollment: Enrollee's email and name, instrument, instrument ID and serial number Ongoing: online status All data scanned by up-to-date malware protection software server-side. | Instrument ID, serial number,<br>online status/history, session<br>and session event log                                  |
| At Rest Encryption             | 256-bit AES   | Sensitive data AES/RSA<br>2048 bit encrypted  |
| Access Restrictions            | Access to data restricted to Beckman<br>Support associates trained in local<br>privacy regulations (e.g., GDPR, HIPAA)<br>via Beckman SSO   | Access to data restricted to<br>Beckman Support associates<br>trained in local privacy<br>regulations (e.g., GDPR, HIPAA) |

| Bandwidth<br>Requirements | 6 Mbit or more suggested                  |  |
|---------------------------|---|--|
| Data Centers              | ISO/IEC 27001 certified<br>GDPR compliant |  |
| Intrusion Protection      | Intrusion detection software present      | Authentication from new location requires email verification |

#### **Remote Desktop Sharing Security**

Thorough review of our IT requirements and consent to the terms of service are required prior to activating remote support features. BeckmanConnect Remote Support includes the following security features:

- Access is restricted to authenticated Beckman Coulter associates who have undergone training to understand the data and privacy guidelines that apply to the customer's region.
- TeamViewer connection allow-listing is deployed to prevent access to instruments from sources external to the Beckman Coulter Service & Support organization.
- Outgoing TeamViewer connection requests and meeting functionality within the client have been disabled.
- TeamViewer provides a uniquely generated 8+ character password for each connection. This password changes with each new session and provides bruteforce attack protection via exponential password lockout, preventing unauthorized connections.
- Following successful authentication of a secure TeamViewer session, users are required to manually approve any screen-view, remote-control, or file-transfer request through the TeamViewer client. Connection requests and file transfers are logged on TeamViewer secure servers for audit purposes.
- Note: File Transfer during remote sessions is currently not enabled for instrument controller PCs containing personal health information (Navios EX, DxFLEX, Data Innovations Instrument Manager, AQUIOS CL, CellMek SPS, Navios). If this feature is enabled in a future release, users must download an update and authorize the new feature during installation before it will be activated.



