



**SeaCare® Support
Overview**

Support Process Overview

This document presents an overview of the type of support Tritan Software Corporation provides for the SeaCare® platform.

It also outlines the various support tiers and the responsibility of each tier to provide support, as well as the process for escalation to Tritan technical support.

Tier I Support – Shiptside

Shiptside Tier I support will be provided by the IT manager’s team on board the ship, and will be responsible for providing Tier I support for the SeaCare® platform.

As part of providing Tier I support, the IT manager’s responsibilities include:

- Help users in the Medical Center with issues accessing SeaCare®
- Resolve Issues regarding user access or permissions to perform certain actions in SeaCare®.
- Diagnose service related issues with SeaCare® such as patient demographics not appearing, billing/Point of Sale integration issues etc.
- Help troubleshoot Issues retrieving lab results from lab devices

When an onboard user reports an issue with SeaCare®, it is a good idea to perform the following initial troubleshooting steps:

- Consider and rule out networking issues, i.e. issues related to SeaCare® or one of its components not being accessible due to an issue with the network
- Check whether the user has permissions to perform the actions he/she is attempting
- Ask questions/check with shoreside medical operations to verify if this is a training issue i.e. the user is expecting behavior or outcome
- Check whether the interfaces sending data to SeaCare® are operational. If you have the ability, examine the interface logs to determine if there was an error.
- Consult the SeaCare® troubleshooting manuals to determine if there is a configuration error with the lab devices or lab workstation. Often, the error is due to issues like Mirth Connect going down, or the QBC Star “forgetting” its static IP address.
- If the issue still isn’t resolved even after your preliminary checks, you can escalate to shoreside support by creating a ticket for IT, or contacting medical operations

Tier I Support - Shoreside

Your organization's shoreside support for SeaCare® is provided by the following groups:

- Medical Operations
- Shoreside IT support

Medical operations can help with the following issues:

- Provide administration for SeaCare® user accounts, such as new accounts, permissions for restricted areas/actions, resetting passwords etc.
- Answer questions regarding SeaCare® functionality, training issues etc.
- Curate feature requests, and communicate to Tritan

Shoreside IT can help with the following issues:

- Provide additional support troubleshooting SeaCare® integration issues
- Escalate technical issues to Tritan wherever necessary
- Report bugs to Tritan for resolution

Tier II Support – Tritan Technical Support

If the shoreside medical operations group or technical support group cannot resolve the issue on their own, they will escalate to the Tritan software technical support team by calling the toll free number (1-877-299-1000) or emailing the support address support@seacare.tritansoft.com.

Tritan's support services are available 24 hours a day, 7 days a week, including American and International public holidays for severity 1 and 2 escalations. High severity issues must be reported via telephone to ensure immediate attention.

In general, catastrophic or critical impact issues will be addressed immediately, regardless of time of day or day of week, and non-urgent issues will be addressed during business hours.

Reporting an issue to Tritan

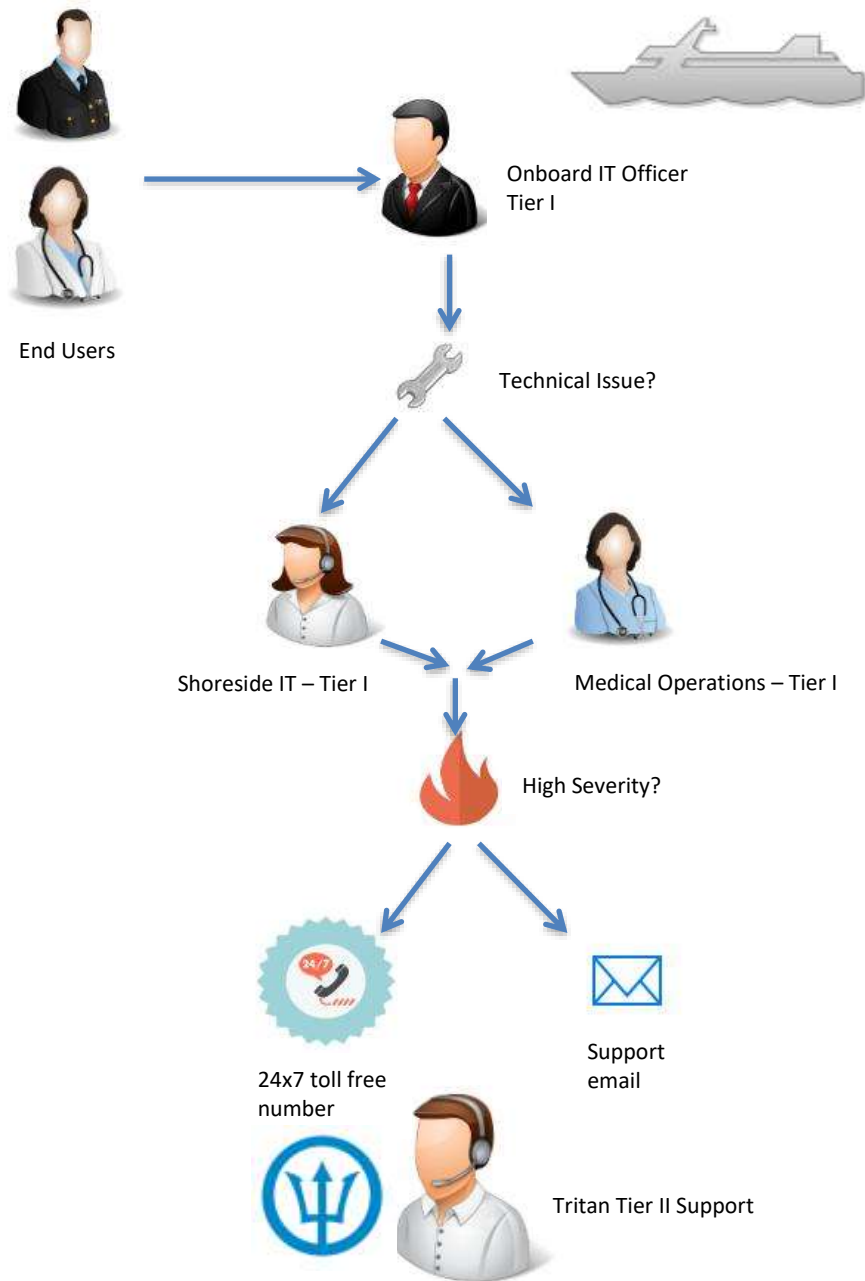
The most convenient way to report a non-high-severity support issue to Tritan is to email the support email address. A high severity issue should also be reported via telephone, especially if it is reported after hours (as per North American time zones) or during weekends or United States public holidays.

Issues with a catastrophic or critical operational impact will be responded to immediately, and Tritan will make a continuous effort to resolve it, regardless of the day of week or time of day. All other support issues will be investigated during business hours in order of impact or severity.

Tritan will always strive to resolve all issues in a timely fashion, and always within the SLAs between Tritan Software Corporation & your organization.

Tritan support specialists will require help from both IT on board as well as shoreside IT support in performing reasonable problem determination and resolution activities. A few examples of these include performing network traces, capture and provide error codes and messages, provide snippets out of logs, changing product configurations, upgrading software versions or modifying processes.

Overview of the Escalation Process



Severity Levels and Response Times

The following table illustrates the timeframes within which you can expect an initial response when an issue is reported to Tritan tier II support, along with the expected timeline for the effort towards resolution.

Please note that due to the varied nature of issues and their causes, it is not possible to either predict or provide a timeframe on how soon an issue can be resolved. Tritan support can, however guarantee that effort will be made within the specified timeframes towards resolution of the issue according to severity.

Tier II Severity levels and Response Times					
Severity Level	Impact	Definition	Method of submission	Initial Response	Resolution Timeline
Severity 1	Catastrophic Business Impact	Complete loss of a core business process and work cannot reasonably continue. Needs immediate attention.	via telephone only	within 1 hour	Continuous effort on a 24x7 basis, until resolution
Severity 2	Critical business impact	Significant loss or degradation of services; Needs attention within an hour	via telephone only	within 1 hour	Continuous effort on a 24x7 basis, until resolution
Severity 3	Moderate business impact	Moderate loss or degradation of service but work can reasonably continue in an (albeit impaired) manner. Needs to be looked into within 2 business hours	via phone, email or web	within 6 hours	Effort during business hours until resolution
Severity 5	Minimum business impact	Substantially functioning with minor or no impediments of services, needs to be looked into within 4 business hours	via phone, email or web.	within 12 hours	Effort during business hours until resolution

Client & 3rd Party Support

In many cases such as critical service interruptions due to onboard network issues or issues with other onboard systems or interfaces, Tritan will require support from either shipboard IT, Client shoreside IT, or from the third party vendor or provider on the onboard system in question.

It will be up to the client (Onboard IT, Shoreside IT support or Medical Operations where appropriate) to make sure that the appropriate resources at the third parties are also engaged in resolving the issue. Tritan will make every effort to reach out to established points of contact where available, but especially in cases where after-hours or weekend support is required, it is the responsibility of the client to ensure that the appropriate resources are engaged.

Types of Support provided by Tritan

Tritan Software Corporation will provide the following types of support to SeaCare®:

Problem Resolution Support

This is assistance for problems with specific symptoms encountered while using the Software, where there is a reasonable expectation that the problem is caused by the Software.

Assistance Support

Short-term advice and guidance for issues not covered within Problem Resolution Support as well as requests for consultative assistance for design, development and deployment issues.

Account Management Support.

Assistance with Service delivery planning, resource facilitation, support planning, escalation management, support usage and planning reviews. Tritan will also suggest best practices for support of the Software.

Remote Support

Support shall be provided by TRITAN via remote access to your computing environment.

Onsite Support Services

In some cases, you can request Onsite Support Services as an additional Service at the rates set forth in Article VI. TRITAN will use reasonable commercial efforts to provide Onsite Support Services and will be subject to resource availability. Tasks performed will vary depending on the situation, environment, and business or operational impact of the issue.

SeaCare® Maintenance Services

Tritan fully supports the entire SeaCare® system. SeaCare® is installed on board the ship as a “virtual appliance”. Though you will be responsible to ensure that the VM environment is functional, the on board network is operational and the integrations with peripherals and services are operational, the client will not be responsible for maintaining SeaCare itself.

Tritan will be responsible for the following maintenance of the SeaCare product/ or appliance:

1) Operating System Maintenance

Tritan will be fully responsible for maintaining the operating system of the SeaCare® system. Tritan will periodically provide OS updates, security patches, performance tuning etc. on the OS. The client will not need to engage a systems engineer on their side to maintain any aspect of the SeaCare® appliance, nor will anyone require administrator access to the SeaCare® appliance.

2) Database Support

Tritan’s DBAs will be fully responsible for maintaining the shipboard and shoreside SeaCare® databases. Schema changes, performance tuning, updates and upgrades will be performed by Tritan DBAs at their discretion, though any potential for planned or unplanned outages will be coordinated with the users and IT on board.



At no point of time over SeaCare®'s lifetime will the client need to engage a DBA to perform maintenance or diagnostics on SeaCare® databases.

3) Web Server Support

Out system engineers will be fully supporting the SeaCare® web servers, both shipboard and shoreside. Onboard IT will only be responsible for making sure that all required ports remain open, and that there are no network or browser configuration issues blocking onboard access to SeaCare®, and ensuring that a reasonable portion of the available satellite connection is available to SeaCare® wherever available.

Please note, that Tritan engineers will, at their discretion, make changes to the OS type, version, database technology, database schema, table structure or programming framework or platform without requiring prior permission from the client, as long as:

- SeaCare® functionality is not going to degrade or be otherwise impacted in a negative way.
- SeaCare® system resource consumption remains within agreed parameters.

SeaCare® Software Updates

Tritan may provide routine Software Updates for SeaCare® which may include improvements, enhancements, replacements and/ or supplements to the Software. These will be provided at Tritan discretion unless specifically requested by shoreside IT/Medical operations.

Tritan will always strive to ensure that these updates do not inconvenience the users on board, and wherever possible, will perform the updates during periods where SeaCare® is not being heavily used.

Please note, however, due to the unpredictable nature of connecting remotely over a satellite connection, SeaCare® might be left in the maintenance state, in which case Tritan will need to wait until the connection is restored to complete the update and restore SeaCare® to its normal state.

These periodic updates will include:

- New features designed to improve the SeaCare® product
- Performance enhancements designed to improve SeaCare®'s performance
- New features based on feedback from the end users
- New functionality built to address compliance requirements
- New functionality requested by client's IT/Medical Operations departments

Common Support Scenarios

This section outlines a few common scenarios that occur while supporting SeaCare® and describes the process for providing support and escalating where necessary.

User Accounts

User accounts are always managed by shoreside medical operations. If a certain user on board needs access to SeaCare®, or they need permissions to perform certain access to SeaCare®, submit a request to shoreside medical operations following your internal process.

Shoreside medical operations will verify whether the user should be provided the requested level of access and then configure the user's account.

On board Interfaces

A few examples of symptoms of issues related to interfaces would be as follows:

- Incorrect voyage showing in SeaCare®
- Crew or Guests are missing in SeaCare®
- Crew or Guest accounts do not come up, even when entering the patient's name or cabin number manually
- There is an error posting the patient's bill

In these situations, the shipboard IT manager should:

- Verify the shipboard system to ensure that the correct voyage is active and that the correct counts of crew and guests are showing.
- Attempt to resend the interface messages to SeaCare® wherever possible
- Examine the integration logs for the shipboard systems, wherever possible.
- Check for onboard network or DNS issues that may be blocking integration messages

If the steps above do not help, the IT manager on board should create a ticket with shoreside IT support. It will be up to the client to ensure that the support request gets routed to the appropriate support specialists who are familiar with troubleshooting and supporting SeaCare®.

Shoreside IT will:

- Refer to their compiled SeaCare® support notes and suggest further resolution steps.
- Contact the appropriate resources at the third party vendors supporting onboard systems where necessary.
- Open a support ticket with Tritan through telephone, web or email, depending on severity or impact.

Tritan will:

- Troubleshoot the interface issues by remotely checking SeaCare®
- Work with the onboard IT manager/ the appropriate contact at the third party in resolving the issue.

SeaCare® Availability

If SeaCare® is inaccessible on board the ship, it should be treated as a severity 1 issue. In this case the onboard IT manager will:

- Check browser settings to see if there is a configuration setting blocking access to SeaCare® or one of features
- Ping the SeaCare® server to diagnose any network issues
- Check onboard firewalls to see if any necessary ports are being blocked
- If the steps above do not help, the IT manager on board should create a ticket with shoreside IT support.

Shoreside IT will:

- Open a support ticket with Tritan through telephone, web or email, depending on severity or impact.

Tritan will:

- Troubleshoot the interface issues by remotely checking SeaCare®
- Work with the onboard IT manager/ the shoreside IT to resolve the issue.

Peripherals

If the signature pad, barcode scanner or magnetic card reader don't seem to be working as they should, follow the instructions in the setup guide to ensure that they are working.

The IT manager on board should:

- Swap out the device in question for a working one and test the operation being attempted
- If it works as expected, place an order to have the defective item replaced.
- If not, open a support ticket with shoreside IT

Shoreside IT will:

- Open a support ticket with Tritan through telephone, web or email, depending on severity or impact.

Tritan will:

- Troubleshoot the interface issues by remotely checking SeaCare®
- Work with the onboard IT manager/ the shoreside IT to resolve the issue.

Lab Devices

If the lab devices such as the QBC Star and Piccolo Xpress aren't sending results back into SeaCare®, onboard IT should perform general first level troubleshooting.

Onboard IT should:

- Check if the lab workstation is switched on and connected to the network
- Check if Mirth Connect and the FTP server is running on the lab workstation
- Check whether the order number from SeaCare® was correctly entered when performing the test.
- If the first step of troubleshooting doesn't resolve the issue, the onboard IT manager should submit a ticket for shoreside IT support

Shoreside IT support will:

- Provide further assistance with troubleshooting the lab devices
- Recommend replacing any equipment deemed defective
- If necessary, submit a support request to Tritan technical support via telephone, web or email
- Provide Tritan with a contact at the manufacturer of the device, if required

Tritan technical support will:

- Provide further assistance with troubleshooting the lab devices
- Work with the device manufacturer contact to resolve the issue, if possible.

Bugs

“Bugs” may be defined as any scenario where a certain feature or module of SeaCare® may not be working as expected or designed, and may be preventing users from successfully completing certain actions.

If a user on board reports a bug, it should be reported to shoreside medical operations.

Shoreside medical operations will:

- Determine if the issue really is a bug or is a case where the user was expecting a different outcome than the intended one.
- Determine if the issue is due to the user merely not having certain permissions
- Determine if the situation is being caused by certain procedures or policies not being followed (e.g. if the user decides to take a “short cut” and charge a guest through guest services, the bill cannot be viewed in SeaCare®)
- Determine if the issue truly is a bug
- Submit the bug to Tritan, through mutually established channels

Tritan will:

- Determine if the issue really is a bug or is a case where the user was expecting a different outcome than the intended one.
- For a true bug, develop a solution
- Depending on the severity of the issue, either release an unscheduled update to SeaCare® (called a hotfix) , or communicate a timeframe for the fix
- Suggest a viable workaround in the meantime

Tritan will always strive to fix bugs as soon as possible.

Feature Requests

SeaCare® use and operation is governed by the medical operations group, so all feature requests for SeaCare®, including feedback from end users, should be reported to medical operations.

Medical operations will curate all feature requests received, and refer them to its internally appointed steering committee for approval. This committee will:

- Review the requests to ensure that the feature being requested doesn’t conflict with an existing policy
- Review the requests to ensure that the feature being requested doesn’t conflict with an established process
- Consider the utility of the request, whether the value provided, justifies the potential cost of development
- Submit the feature request to Tritan, via a change request form.

Feature requests submitted to Tritan will be reviewed internally, and will:

- Either approve or deny the feature request, based on the information provided



- Request further information, such as specific details of the requested feature
- Provide an estimated number of hours, and the price for the development of the feature.
- The SeaCare® release version that the feature could be released in
- The expected timeframe for the release.

Medical Operations will review the response from Tritan, and decide whether to proceed with the feature request.
