

MAINTENANCE SUPPORT

Case Study

Domain: Imaging Technology

Type: Maintenance Support

“Software for Optical microscopes that identifies the inclusions in material (steel) and grade them according to available standards”

B.A.T. to provide maintenance support for metallographic imaging software after it was released to the market

The imaging software was released by a leading global innovator, manufacturer and supplier of high precision optical solutions. The support activity involved maintaining this software throughout its operational life.

Challenge

- “Short Response Time” to client’s each customer’s reported issues and delivering comprehensive solutions.
- To capture the knowledge of existing software for Optical microscopes and its code base to provide quick and accurate support

Solution

- An **Onsite-Offshore model** was opted i.e. B.A.T. matched the geographical timing with the client for effective and timely delivery.
- B.A.T. developed detailed traceability matrix for faster response time which traced the features to method within the code.

Assessing The Solution:

The client is a leading global innovator, manufacturer and supplier of high precision optical solutions based on microscopes and related instruments. The client also offers advanced software and Imaging solutions supporting a wide range of applications in the field of optical microscopy.

B.A.T. assiduously assessed the client's requirements of "**Maintenance Support**" of software that identifies the inclusions in material (steel) and grades them according to available standards. The scope of services for B.A.T. was fixed for this project i.e.

1. **Corrections of defects that are found in existing operational software**
2. **Post sales support issues**

The service deliverable includes resolution of issues arising during operational life of the software which may require appropriate explanations to customers or modifications to software.

The customer being a leading global name in the field of high precision optical solutions based on microscopes and related instruments, B.A.T. had to ensure that robustness and quality of the development adhering their existing stringent standards.

Solutions Deployed:

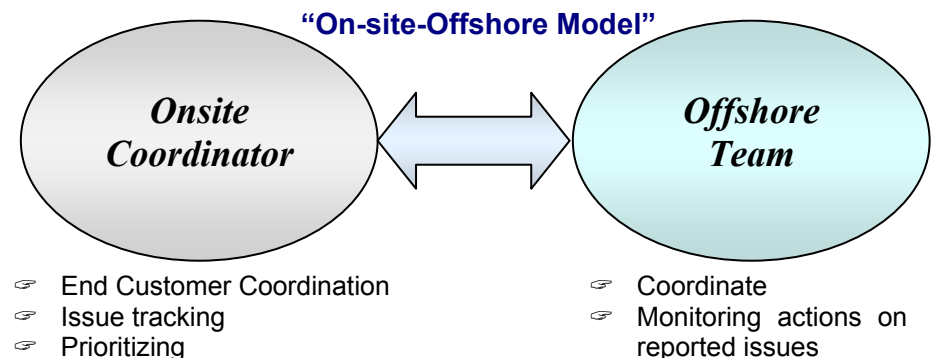
1. For faster response time, B.A.T. has developed a **detailed traceability matrix**.
 - a. It traces the features to methods within the code.
 - b. Gives the number of lines of code per method and complexity of the method.
 - c. The traceability matrix used to analyze the impact of a change as well as to estimate the time for modification.
2. First meaningful response (solution or suggested solution with estimated time for fixing) for any identified issue is provided in 3 working days.
3. B.A.T. also matched the geographical timing with the client.

Delivering The Solution:

Client approached B.A.T. for assistance. B.A.T. team assessed the exact requirement of the client and decided to follow "**On-site Offshore Model**" for faster response and resolving successfully all the issues of client's customers in the current imaging software for high precision optical instruments.

The client looked forward B.A.T. as a competent organization having skills in the area of image processing allied with metallurgy, to carry out their maintenance activity. B.A.T. deliverables included resolving of issues arising during operational life of the software which may require appropriate explanations to customers or modifications to software.

Correct understanding of application, core software and end-user perspective plays vital role in providing accurate solutions, thus helps B.A.T. to handle entire process very smoothly and professionally which is well appreciated by the client.



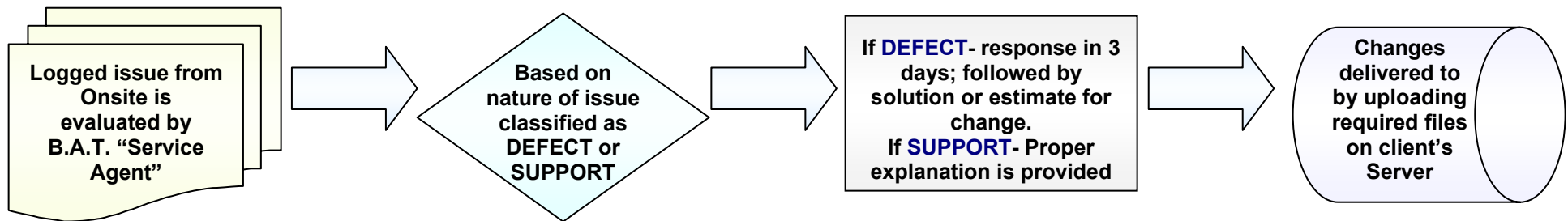
Methodology:

Evaluation of Issue Logged - The issues logged by the “Service Administrator” is evaluated by B.A.T. “Service Agent”.

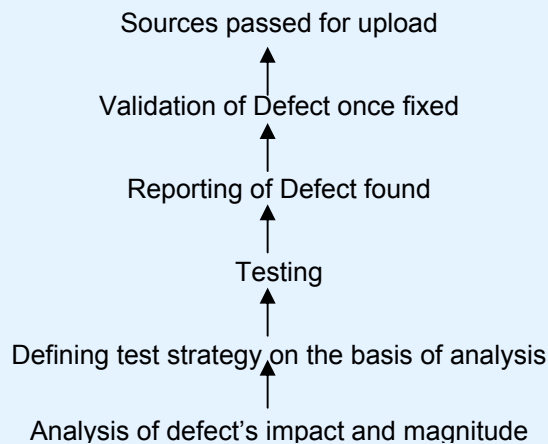
Defect or Support classification- Depending on the nature of issue it is classified as Defect or Support. After classification, the response for the defect is provided in 3 working days, which may be a solution for the defect or an estimate for the required change. The support issues are meticulously handled by providing pertinent explanation and communication.

Resolving Issues- All the necessary and best steps are taken to resolve the issues in the mentioned timeframe. For effective and timely delivery, B.A.T. has also matched the geographical timing with the client.

Delivering the changes- Finally, the changes made are delivered to Service Administrator by uploading the required files on the central server. All the changes undergo a stringent testing process.



Testing Process:



Key Technologies:

- Platform: Microsoft .Net
- Environment: VS 2003
- Language: C#.Net
- Rational Tools– Requisite Pro, XDE, Purify-Plus, Robot, Clear Quest and Clear Case
- Perforce

Benefits:

- The client fulfilled their commitment to the customer without any major management and resource overheads.
- B.A.T. software expertise coupled with domain expertise reduced maintenance cost for the client.
- This model helped client to provide continuous support to their customers globally.
- The client had access to diverse skills under one roof– B.A.T.
- B.A.T. worked as an extended arm to the client, which helped client to concentrate on Core Tasks.