



INFINIDAT

Support Workflow

Contents

1 Support planning and workflows 1

1.1 Support flow 1

1.2 Product Maintenance 3

1.3 Open customers reported bugs 4

1.4 Ticket tracking..... 5

1.5 Ticket workflow 5

1.6 Handling feature requests 5

1.7 Feature request workflow 6

1.8 Working with development to resolve issues..... 6

1.9 Call Center 7

1.10 INFINIDAT BackOffice - Automatic event analysis 7

1.11 Heartbeat Events 7

1 Support planning and workflows

This document covers the following subjects:

1.1 Support flow

1.1.1 Contact support

Customer can report an incident or potential bug via:

- INFINIDAT representative
- Web site <http://www.infinidat.com/support> (This functionality will be available in the near future)
- Email - support@infinidat.com
- Call center - (see 1.1.2.1)

When opening a ticket, the following information is required:

- Company Name
- Problem Description
- Contact Name, Phone Number and Email address
- Machine Name and/or System serial number (optional)
- Urgency (Critical/Non-Critical)

1.1.2 Level of Support

1.1.2.1 Call Center

INFINIDAT call center is available 24x7x365.

The contact numbers are available on the following URLs, and are also copied here.

- https://content.infinidat.com/contact_us
- <https://support.infinidat.com/hc/en-us/articles/202341652-Contact-us>

Country	Phone Number
Australia	1-800-763-172
Austria	0800-802266
China	400-120-9387

Croatia	0800-777-924
Cyprus	+357-24030094
France	+33-184885565
Germany	+49-30224030222
Hong Kong	+852-300-85777
India	+91-80-71279135
Israel	1-809-494407
Italy	800-876-616
Japan	0800-919-9634
Mexico	01-800-099-0262
Netherlands	+31-858880285
Norway	800-24-744
Romania	+40-37-6300067
Russia	8-800-100-9660
Singapore	800-130-2201
South Africa	0-800-999-376
Spain	900-838585
Sweden	020-889-886
Turkey	+90-212-8882432

UK	+44-2033184704
USA/Canada	1-855-900-4634

1.1.2.2 L1 – Technicians

INFINIDAT provides 24x7 for all support levels (support center, technicians and 3rd level support). We augment our support with local/regional personnel, contractors, and other third parties where we do not fulfill the support directly ourselves.

1.1.2.3 L2 – Technical Advisors

A TA will be assigned to major clients with the following responsibilities:

- Provide oversight and technical input into the design and implementation of INFINIDAT's storage arrays.
- Coordinate technical activities
- Technical assistance with any day-to-day implementation issues
- Serve as an escalation point for issues and additional feature requests
- Assist with proactive infrastructure definitions and planning
- Responsible for customer interactions and communications
- Deliver Customer Support Plans, Crisis Management and Resolution Plans

1.1.2.4 L3 – 3rd level Development engineers

The 3rd level development engineers are the most skilled and technically competent members of INFINIDAT. Their roles are:

- Provide the support liaison between customers and INFINIDAT development groups, including product management, R&D and other Business units.
- Perform in-depth troubleshooting including remote sessions, reading system dumps and going through the product code level to identify and solve complex support issues that were escalated by the other support levels.
- Maintain a low rate of non-bug escalations to development team.
- Write technical notes and troubleshooting procedures to be used by the entire support organization.
- Managing assigned cases to meet service levels.

1.2 Product Maintenance

1.2.1 Redundancy considerations

The INFINIDAT storage arrays automatically emit alerts for every event. These events are being sent and analyzed to INFINIDAT's Back Office program.

INFINIDAT L3 personnel initiate a root cause analysis process and contact the customer with the results.

INFINIDAT's storage arrays implement an automated, self-healing recovery process. Failed disk drives in INFINIDAT storage arrays do not need to be replaced immediately like conventional systems do.

The INFINIDAT storage arrays are designed to lower the exposure for double disk drive failure. We accomplish this via several key factors:

Since the InfiniBox storage array encompasses a free capacity mechanism (that has sufficient capacity for 12 disk drives failures), the replacement for a failed disk drive can be deferred until the next scheduled onsite maintenance visit, or until six or more disk drives have failed or until another component replacement is required. The point here is that it is a non-critical operation and one that can be deferred or scheduled at a convenient time for customer.

1.2.2 Handling failed components

Certified customers can replace disk drives, while being remotely assisted by INFINIDAT Support. (Documented in: "INFINIDAT Disk Drive Replacement Document").

Other components are not yet built for customer maintenance and can be replaced only by L1 support engineers. In future code versions the intention is to add additional components to be customer replaceable, and provide self help guides and repair procedures for customers to use themselves

1.3 Open customers reported bugs

When a customer reports a potential bug to the support center:

- A ticket will be opened in INFINIDAT's bug tracking software system
- The ticket will be processed by the INFINIDAT support team
 - If it is a new bug, it will be opened under to the relevant problem area tracking bucket
 - If it is a known bug, a related ticket will be mapped to the original ticket

All INFINIDAT personnel will be able to watch all tickets.

Customer Support tickets will be updated by the Support group according to the progress, which should be at least once per week.

A Customer Support ticket will be considered as fixed if a resolution was found or a fix is to be implemented in the next code version.

Only the reporter can close the ticket and it should only be considered as closed if the fix was fully implemented in a GA code release or a patch/workaround was implemented on the customer machine and the results are satisfactory to the reporter/customer.

1.4 Ticket tracking

All tickets will have a customer name field, (development projects will have multiple customers represented in the Label field)

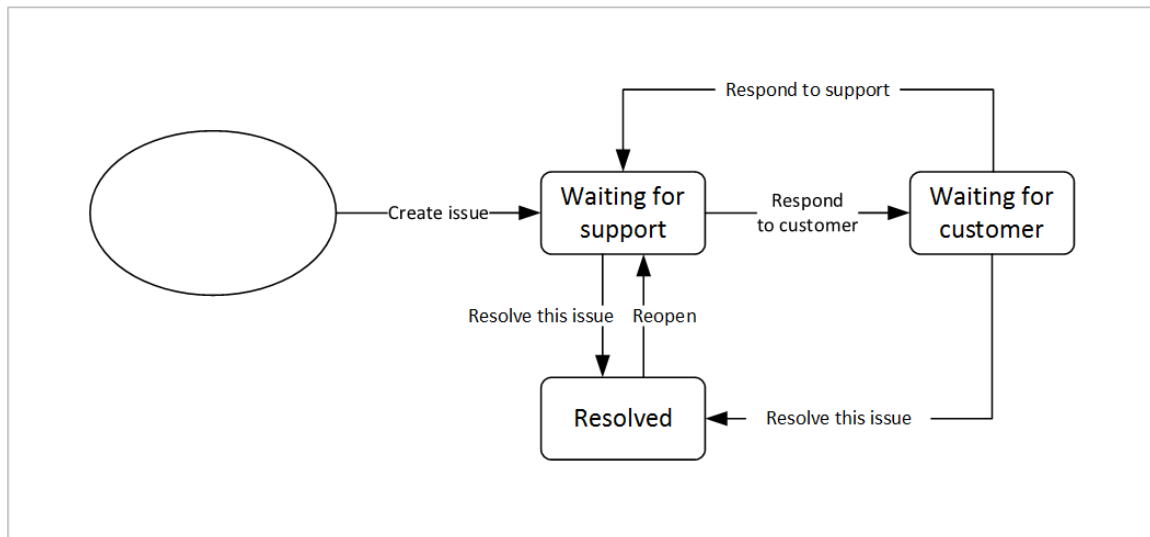
In the near future, INFINIDAT will add functionality to it's web site with A web-landing page for each customer.

The customer account team will be set as a 'watcher' for these pages,

The page will contain:

- General customer description
- Specific requests and important notes
- Priority:
 - **Critical** - Product inoperative or Product to failure
 - **Major** - Customer impact, such as performance degradation or missing functionality
 - **Minor** - Minor loss of function, or other problem cause minor impact
 - **Trivial** - Cosmetic problem like misspelt words or misaligned text.
- Related Customer Support ticket list
- Related Product feature request list
- Related Development tickets

1.5 Ticket workflow



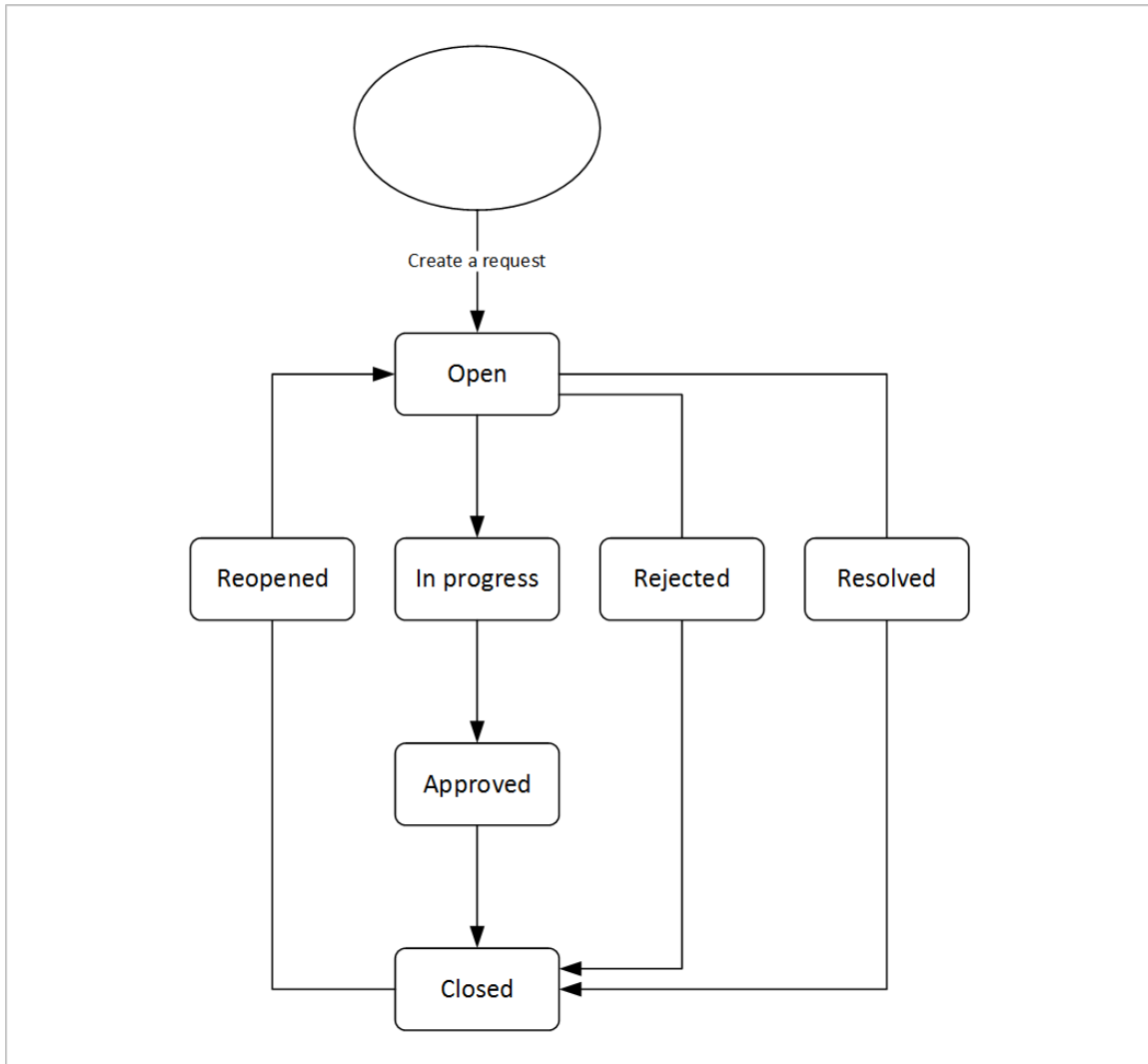
1.6 Handling feature requests

All Feature Requests should have related tickets in project "Product".

A ticket will be opened with the following mandatory fields

- Issue Types: Feature Request
- Component: InfiniBox, IZBox or HostSide
- Account: customer name

1.7 Feature request workflow



1.8 Working with development to resolve issues

During A weekly meeting:

- Support team will discuss all the 'in progress' critical or long handle time issues.
- Product team will raise all 'in progress' blocker feature requests

- The meeting and action Items will be documented in the wiki

1.9 Call Center

Call center will provide 24x7x365 human telephone support service.

All accepted calls will be documented and sent by email to the support team. The call center has an updated duty roster with additional INFINIDAT support management phone numbers. They are committed to forward all urgent requests to the support team immediately.

1.10 INFINIDAT BackOffice - Automatic event analysis

- The backoffice system role is to become a smart filter for information arriving from INFINIDAT systems and to central store this info for future analyst.
- The BackOffice system gets SMTP Events,
 - Collects the data from InfiniBox systems.
 - Analyse the data and creates support tickets if needed.
 - Stores and gathered information in a database.
 - Displays collected data in an internal centralized support dashboard.

1.11 Heartbeat Events

- The heartbeat event is a special event the system sends to report it is alive.
- The event contains mostly static data to allow system technicians to proactively detect potential system malfunctions.
- The event is being sent similarly to all other events to INFINIDAT Back Office server via SMTP

© Copyright INFINIDAT LTD 2015-2017.

This document is current as of the date of and may be changed by INFINIDAT at any time. Not all offerings are available in every country in which INFINIDAT operates.

The data discussed herein is presented as derived under specific operating conditions. Actual results may vary. THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. **INFINIDAT** products are warranted according to the terms and conditions of the agreements under which they are provided.

INFINIDAT, The INFINIDAT logo, InfiniBox, InfiniRAID, InfiniSnap, Host PowerTools, and any other applicable product trademarks are registered trademarks or trademarks of INFINIDAT LTD in the United States and other countries.

Other product and service names might be trademarks of INFINIDAT or other companies. A current list of INFINIDAT trademarks is available online at

<http://www.INFINIDAT.com/legal/trademarks/>



Please Recycle