Customer Support Guide

Support, service requests, and policies for VDURA customers



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1. Welcome to VDURA!

Dear Valued Customer,

We are thrilled to welcome you to the VDURA® family! Your decision to partner with us is deeply appreciated, and we are excited to support you on your journey to harness the full potential of your data. At VDURA, we pride ourselves on delivering unparalleled performance, reliability, and innovation in data storage and management.

1.1 Our Commitment to You

- **Exceptional Support:** Our dedicated customer support team is here to ensure your experience with VDURA is seamless and productive. Whether you have questions, need assistance, or seek advice on optimizing your systems, we are just a call or email away.
- **Cutting-Edge Technology:** With our advanced AI and HPC data solutions, VDURA provides the tools and technologies that empower your organization to excel in today's competitive landscape. We are committed to continuously enhancing our products to meet your evolving needs.
- **Reliable Partnership:** Your success is our top priority. We are dedicated to building a long-term relationship with you, characterized by trust, collaboration, and mutual growth.

We are confident that VDURA will exceed your expectations and provide you with the data solutions you need to thrive. If you have any questions or require further assistance, please do not hesitate to reach out to our support team.

Thank you for choosing VDURA. We look forward to a successful partnership!

Warm regards,

Your VDURA Team

2. Introduction to VDURA Customer Support

This chapter covers Our Mission, Global Service Locations, and Hours of Operation.

2.1 Our Mission

The mission of VDURA Customer Support is to achieve a world-class level of customer satisfaction and loyalty through technical excellence, communication, and responsiveness.

The VDURA Customer Support team supports all VDURA hardware and software, as well as third-party OEM hardware and software. We provide both direct support and back-end support for our service partners located globally. Support is provided for all products under warranty, as well as products covered by one of our service programs.

2.2 Global Service Locations

VDURA maintains three major technical offices in the United States: Milpitas, CA; Pittsburgh, PA; and Niwot, CO, as well as a logistics depot in San Jose, CA. Our Service Team has Technical Support Engineers (TSEs) located in Pittsburgh, which allows them to be co-located with our software development teams. TSEs have direct access to VDURA lab equipment, allowing us to get "hands-on" with specific hardware and software revisions as needed.

VDURA Customer Service operates 365x24x7 and leverages our global customer relationship management database to ensure a smooth and professional case hand-off between TSEs.

VDURA also operates European logistics depots that service replacement parts in Basildon, UK for British customers and Veldhoven, Netherlands for all other European customers.

2.3 Hours of Operation

VDURA Customer Service operates 365x24x7. Customers and partners are encouraged to use the VDURA Support Portal (`support.VDURA.com`) to engage the customer service team as their primary means of communication. This ensures all Service Request (SR) and Return Material Authorization (RMA) updates are properly documented and routed. As a secondary method, VDURA provides world-wide toll-free telephone access should customers need to speak to a TSE immediately.

Customers who have purchased service through a VDURA-authorized support partner should contact them for all initial product support inquiries. All VDURA-authorized support partners have been trained to support VDURA products and are authorized to engage VDURA Customer Service on behalf of customers.

3. Getting Started

This chapter covers Preparing for Installation, Who's Who?, and Contacting VDURA Customer Service.

3.1 Preparing for Installation

After placing your order with VDURA, your Systems Engineer or service partner will provide you with a site survey document to help prepare for product installation. VDURA would also like to know who from your team will be authorized to contact VDURA Customer Service. These individuals should have Support Portal accounts set up ahead of time, so that they can contact us at any point during or after the installation of your VDURA product. If you are being supported by an authorized support partner, simply contact your partner for assistance.

Your product will ship to the desired location and should prove simple to install with minimal time and effort using our installation documentation. VDURA also offers installation services should you require assistance with product installation and configuration.

3.2 Who's Who?

The VDURA Customer Service team consists of many individuals who may become engaged at different stages in the product lifecycle, but all work together to ensure that your expectations are met or exceeded and you remain a long-time satisfied customer.

Role	Description
Account Executive	Customer sales contact or channel partner account manager.
Director, Global Services	Acts as interface between all customer issues and engineering, sales, operations, and executive management teams. Serves as second-level escalation point.
Sales Operations	Works with Account Executives and the Director, Global Services on issues with customer product orders, as well as service upgrades and renewals.
Service Operations Analyst	Works with TSEs, Sales, Operations, and Account Executives on problems associated with asset entitlements, RMA delivery, failed part returns, and any other logistics-related issues.

Role	Description
Service Team Leader	Ensures all customer issues are progressing toward resolution and serves as a first-level escalation point, should SRs be escalated by customers.
Systems Engineer (SE)	Partners with Account Executives to provide pre-sales technical support. Introduces VDURA products from a technical perspective and helps integrate storage solutions. Responsible for site surveys prior to installation and informal training on basic product usage.
Technical Support Engineer (TSE)	Once a product is installed, the Customer Service team provides post-sales support for hardware and software. TSEs work on SRs, which are usually created by our customer and partner contacts for products under valid warranty or service subscription support. TSEs are responsible for solving technical problems and work with Service Management on issues they are unable to solve.
Technical Writer	Creates and maintains a variety of internal and customer-facing documents and online resources.
Vice President, Engineering	Focuses on new product delivery and existing product quality.

3.3 Contacting VDURA Customer Service

There are several ways to contact VDURA, depending on your needs.

Need	Method
Internet	The VDURA Support Portal at `support.VDURA.com` provides access to submit a service request. It also offers access to service advisories, release notes, and product documentation to assist with technical issues.
Technical Support, by telephone (North America)	1-888-726-2727
Technical Support, by telephone (International)	1.412.323.6439
Technical Support, by email	`technical-support@vdura.com`
File a Service Request	`support.VDURA.com`

You can get technical support and file service requests using any of these methods.

4. The VDURA Support Portal

This chapter covers What the VDURA Support Portal Is, What You Can Do, Your Account Name and Customer ID/Account ID, Getting Access, and Audience and Scope of This Guide.

4.1 What the VDURA Support Portal Is

The **VDURA Support Portal** is our customer support web portal, where you can engage our team of TSEs for any type of question or problem that may arise with the use of our storage appliance. Raise a request, attach the files an engineer needs, and follow the request until it is resolved. The portal also hosts documents you may need, such as service advisories, release notes, and product documentation.

The portal can be reached at `https://support.vdura.com`. The portal works in an ordinary web browser, but you need an account to use it (see chapter 5).

> **Note:** In this guide, a request you raise in the portal is a Service Request, or SR, and its reference starts with "SR-".

> **Note:** Service requests opened before the move to the support portal were not migrated. The support portal shows only requests created in it. VDURA can still look up earlier service requests for a period of time. If you need information from one, ask Technical Support.

4.2 What You Can Do

- **Raise a request** for a general question, configuration help, a software upgrade or patch, a crash, a performance problem, a data or filesystem issue, a hardware failure or RMA, or DirectFlow client help (see chapter 8).
- **Attach a sysstat** or other files to a request (see 8.5).
- **Track your requests**, open any of them, and add comments (see chapter 9).
- **Read or download** service advisories, release notes, and product documentation (see chapter 10).
- **Search** for pages and request forms (see chapter 11).
- **Manage your account**, including your password, language, and time zone (see chapter 12).

4.3 Your Account Name and Customer ID/Account ID

Each unique installation location is assigned a CustomerID, which will be entered into all your storage appliances at that specific location. This ID is also used within our customer relationship database so that we can see all orders, SRs, RMAs, assets, and entitlements associated with your product throughout its lifecycle. This ensures we provide you the correct level of service and support each time you contact us for assistance.

Your Customer ID/Account ID is the ID you will use to register your product in the VDURA PanActive Manager™ GUI or the PanCLI™ command-line interface.

4.4 Getting Access

Access to the Support Portal is provided on a per-contact basis, all of which are linked to your CustomerID. Each contact must provide a phone number and an email address, so we can contact you by phone if needed and keep you updated on your open Service Requests. You can provide contact information to your VDURA Account Executive or Systems Engineer during the sales process. We ask that only official business email addresses be used. In the interim, feel free to contact us using our toll-free phone numbers.

4.5 Audience and Scope of This Guide

This guide is written for VDURA customers who use the Support Portal. It walks through every page and control you will see, from signing in to tracking a request, and it explains how VDURA Customer Support handles your requests. The request types and documents available change as VDURA adds new ones.

5. Signing In

This chapter covers Opening the Portal, Enter Your Email, Enter Your Password, Finish Signing In, If You Are Already Signed In to Another Atlassian Product, and Signing Out.

5.1 Opening the Portal

Go to `https://support.vdura.com`. If you are not signed in, the page shows a **Login required** message. Click **Log In**.

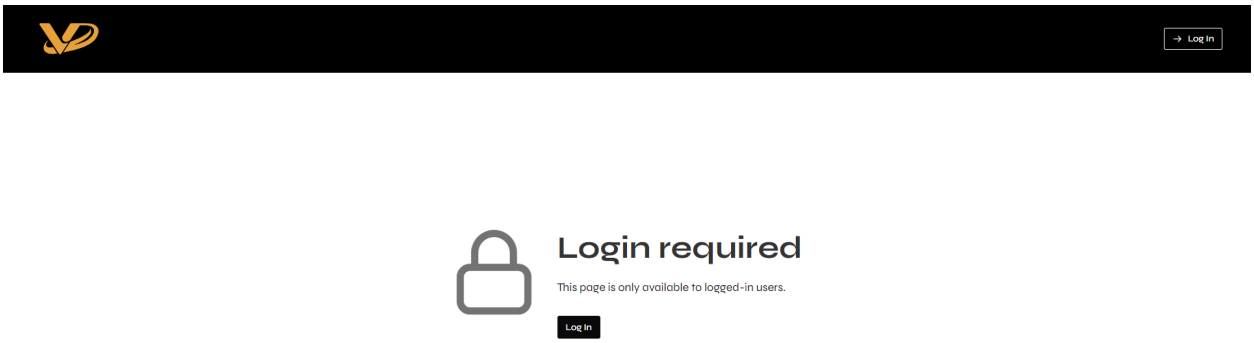


Figure 5.1. The Login required page.

5.2 Enter Your Email

The same page serves new and returning users.

1. Type your email address in the **Email address** field.
2. Click **Next**.

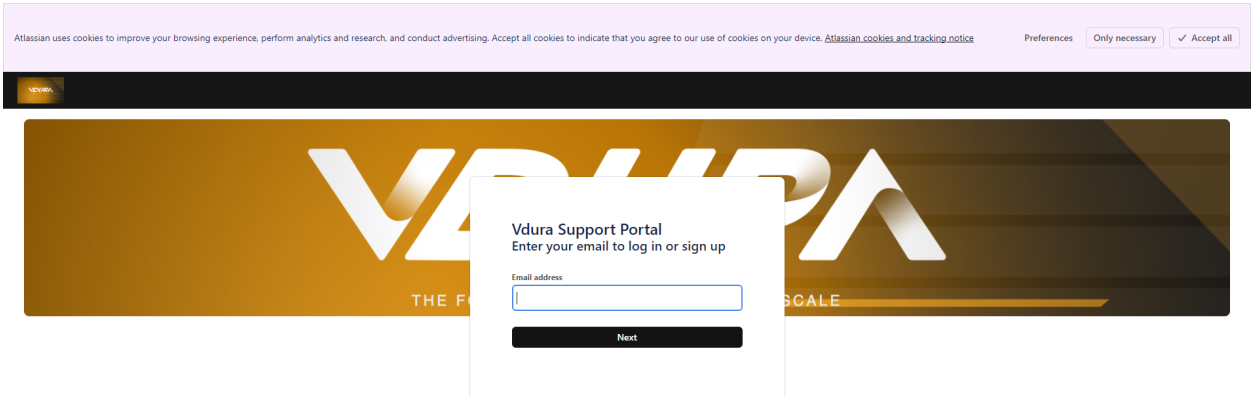


Figure 5.2. The email page.

The first time you visit, a cookie notice from Atlassian, which hosts the sign-in, appears across the top of the page. Choose **Preferences**, **Only necessary**, or **Accept all**.

5.3 Enter Your Password

The eye icon in the **Password** field shows or hides what you type.

1. Type your password.
2. Click **Continue**.

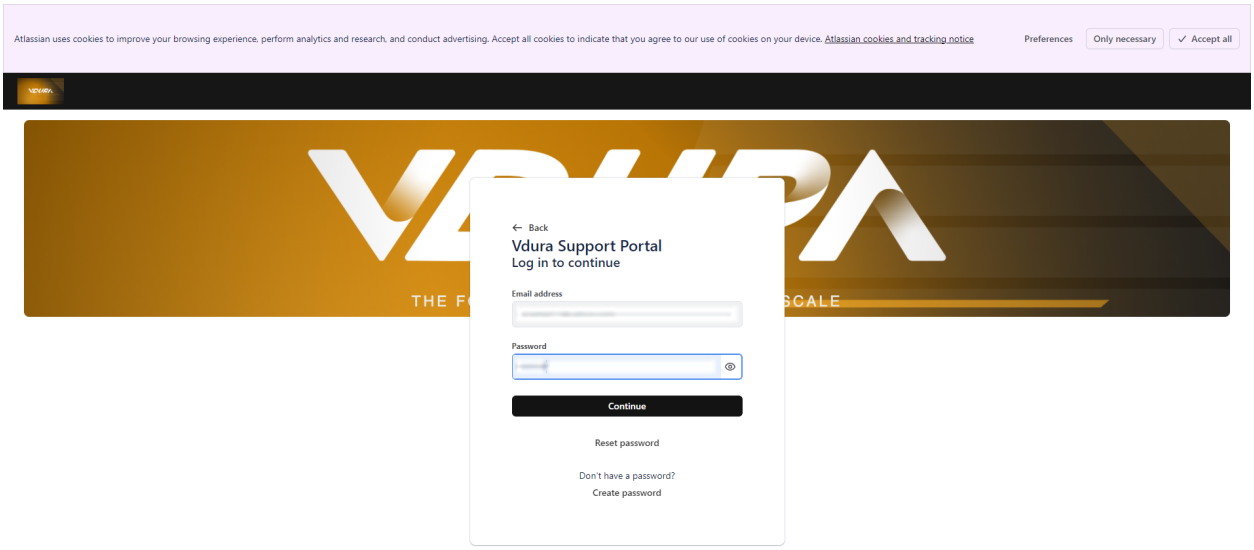


Figure 5.3. The password page.

The page has three other controls:

Control	What it does
Back	Returns to the email page.
Reset password	Starts a password reset.
Create password	Appears under “Don’t have a password?”. Use it the first time you sign in.

5.4 Finish Signing In

After your password is accepted, the portal opens on the home page (see chapter 6).

If you sign in once, close the window, and come back to the portal later, your browser may still hold your sign-in. In that case a **VDURA SUPPORT** page with a single **Log In** button can appear instead of the sign-in pages. Click **Log In** to continue.

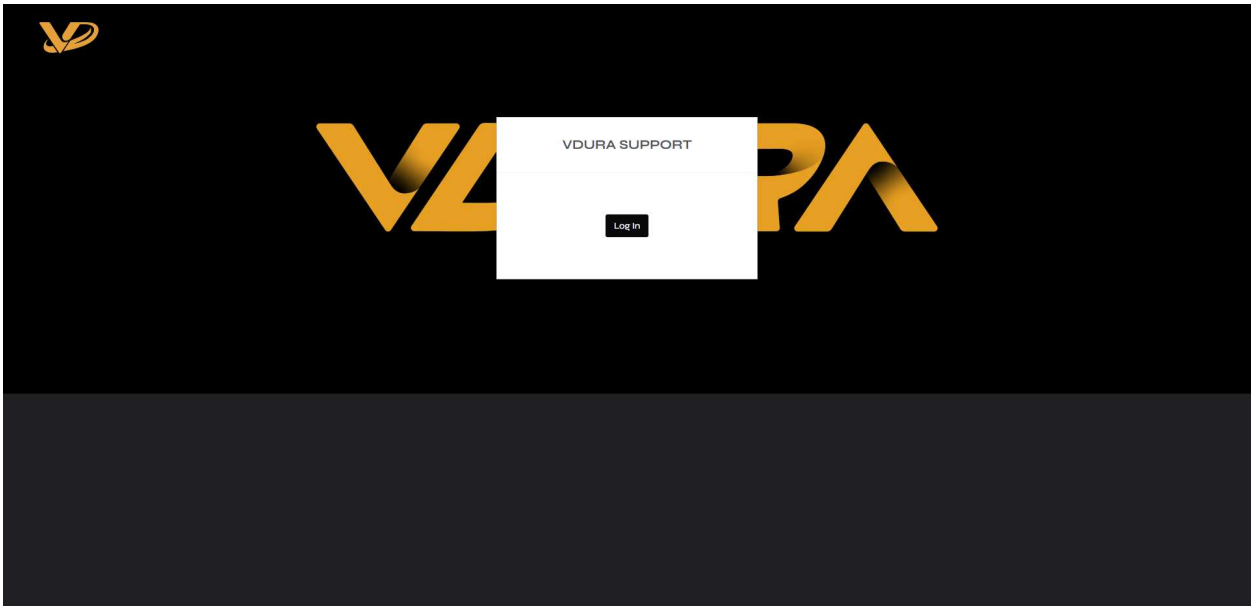


Figure 5.4. The VDURA SUPPORT page.

5.5 If You Are Already Signed In to Another Atlassian Product

The portal reuses an existing Atlassian sign-in in the same browser. If you are signed in to another Atlassian product, such as Jira or Confluence, the portal may try to use that account without showing the sign-in pages. If that account is not a portal customer, you see a **No access** message saying that your account does not have access to the help center, and suggesting you contact your admins.

To sign in with your portal account instead, do one of the following:

- Open the portal in a private (incognito) browser window and sign in with the email address you use for the portal.
- Sign out of the other Atlassian product, then open the portal again.

5.6 Signing Out

1. Click your account icon in the top-right corner of any page.
2. Click **Log out**.

See 12.1.

6. The Home Page

After you sign in, the portal opens on its home page at `https://support.vdura.com`.

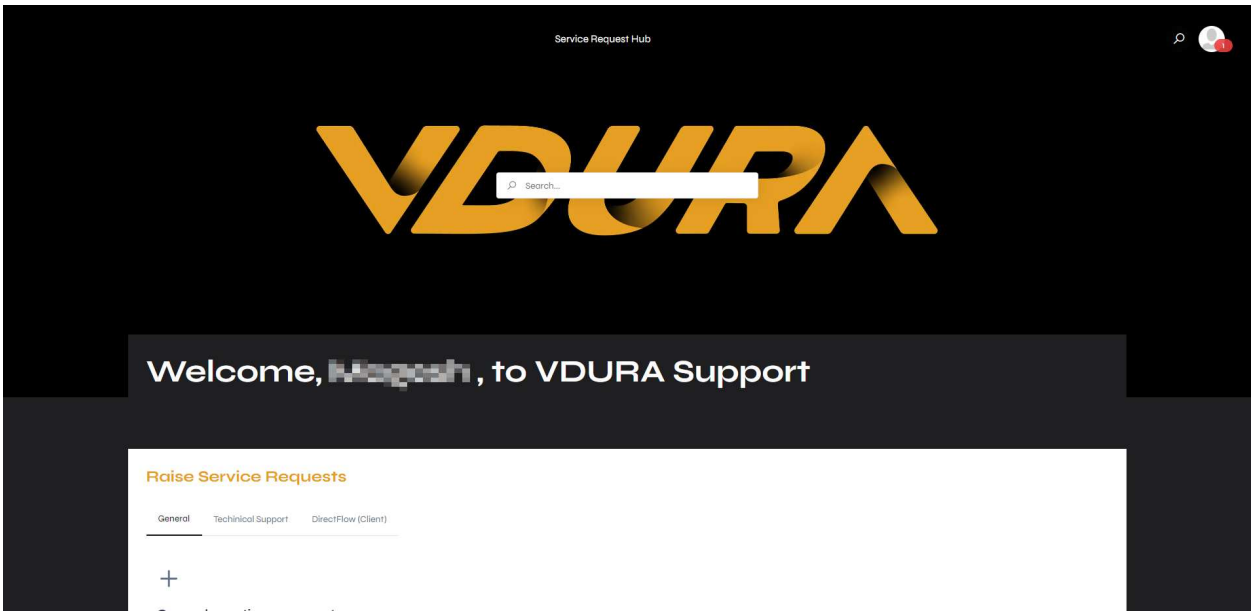


Figure 6.1. The top of the home page.

6.1 Page Layout

From top to bottom:

Element	What it is
Top bar	The **Service Request Hub** label, a search icon, and your account icon, which shows a red badge with a count when there are requests for you to review.
Banner	The VDURA wordmark with a **Search...** box (see chapter 11).
Welcome heading	A heading that greets you by first name.
Raise Service Requests	Tabs of request types you can raise. See chapter 7.
Request tracking	A table of your requests with filters. See 9.1.

Element	What it is
Resource sections	**Service Advisories**, **Release Notes**, and **Product Documentation**, each with a button. See chapter 10.

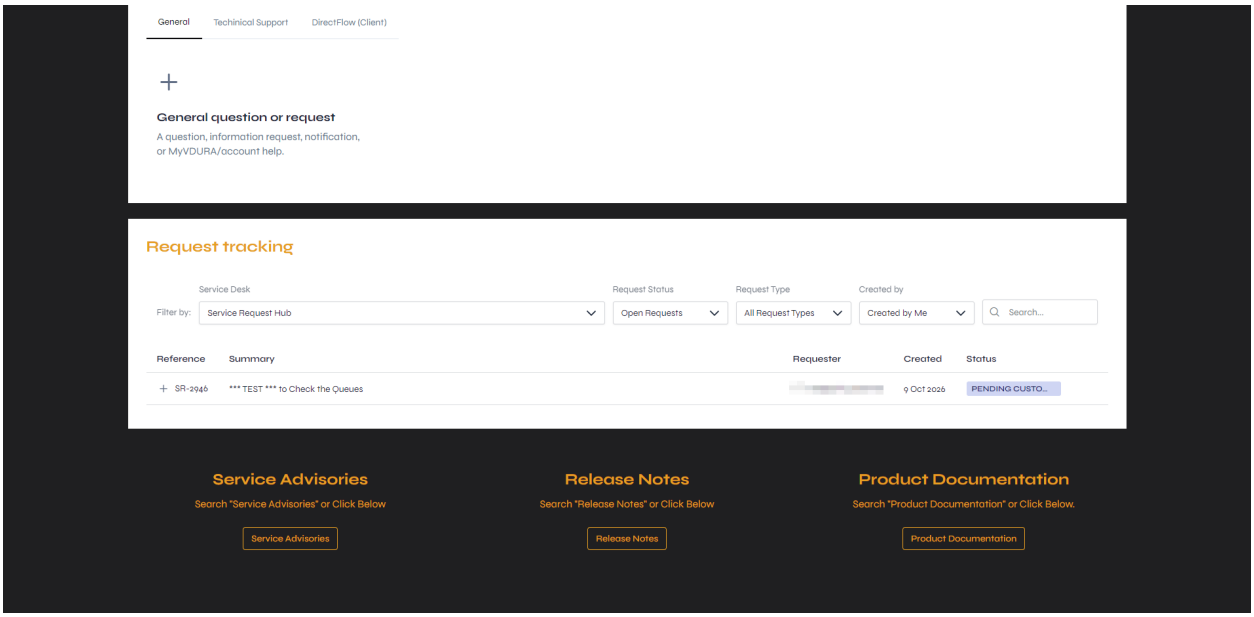


Figure 6.2. The lower part of the home page.

6.2 The Top Bar

The following table describes what each control does.

Control	What it does
Service Request Hub	Opens the Service Request Hub page (see 6.3).
Search icon	Opens the search pop-up (see chapter 11).
Account icon	Opens the account menu (see 12.1).

The top bar has no VDURA logo to click.

6.3 The Service Request Hub Page

Clicking **Service Request Hub** in the top bar or in the breadcrumb at the top of a request's page opens a second page, at `https://support.vdura.com/portal/1007`. It has the same top bar and banner as the home page, but no welcome heading and no tabs:

- **Request Types:** All nine request types in one grid of tiles, instead of three tabs.
- **My open requests:** Your open requests, with the same filters and columns as **Request tracking**.
- The three resource sections, as on the home page.

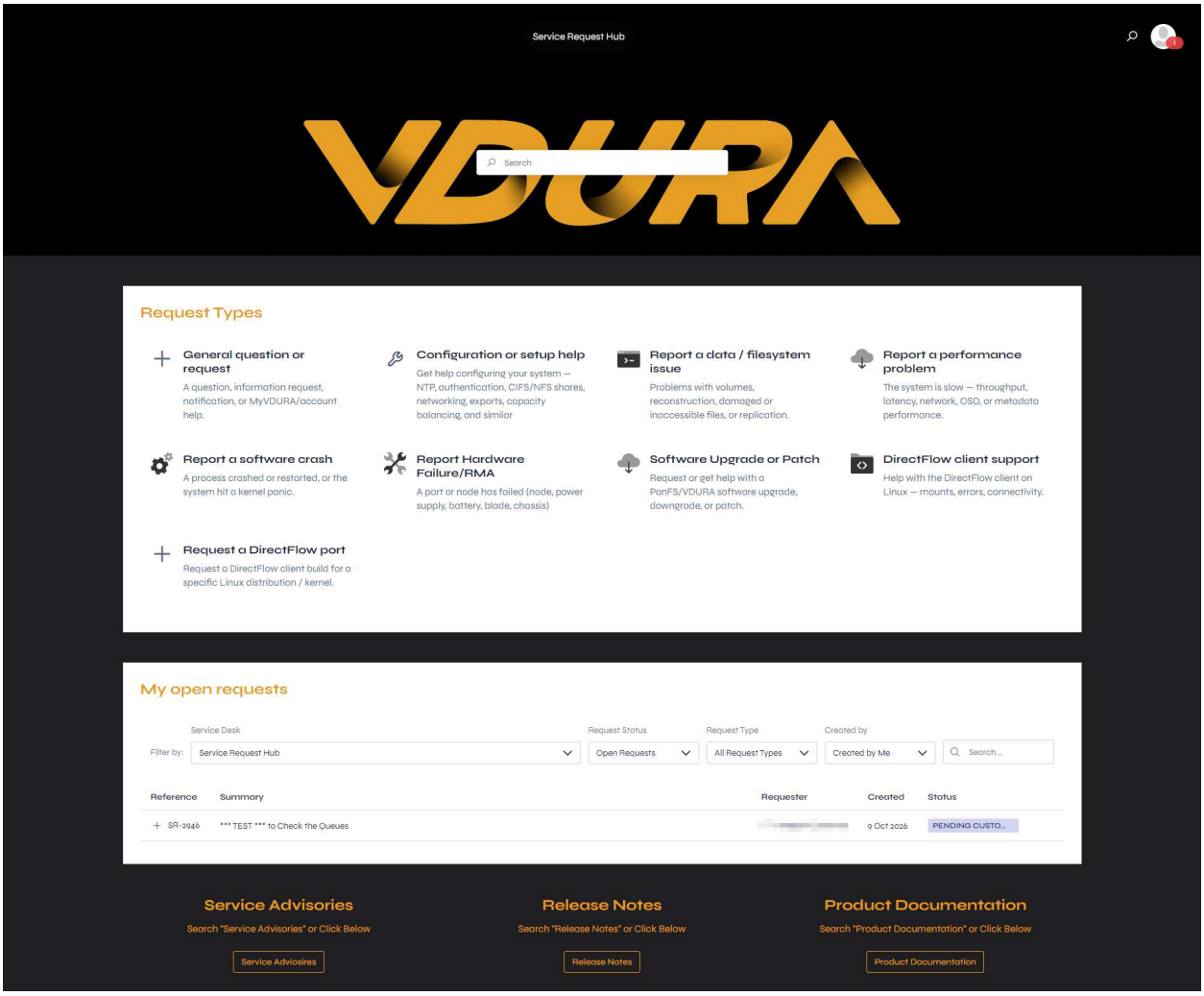


Figure 6.3. The Service Request Hub page.

The Service Request Hub page has no link back to the home page. Type `support.vdura.com` in your browser's address bar or use its Back button.

7. Request Types

The **Raise Service Requests** section lists every request type you can raise. The types are grouped into three tabs. Click a tab to see its request types, then click a tile to open its form (see chapter 8). The Service Request Hub page (6.3) shows the same nine tiles in one grid.

7.1 The General Tab

The **General** tab has one request type: **General question or request**, for a question, information request, notification, or account help. Its tile says the priority is preset to 2 - Major, and that for a specific technical issue you should use the "Technical Support" tab, which is the tab labeled **Techinical Support**.

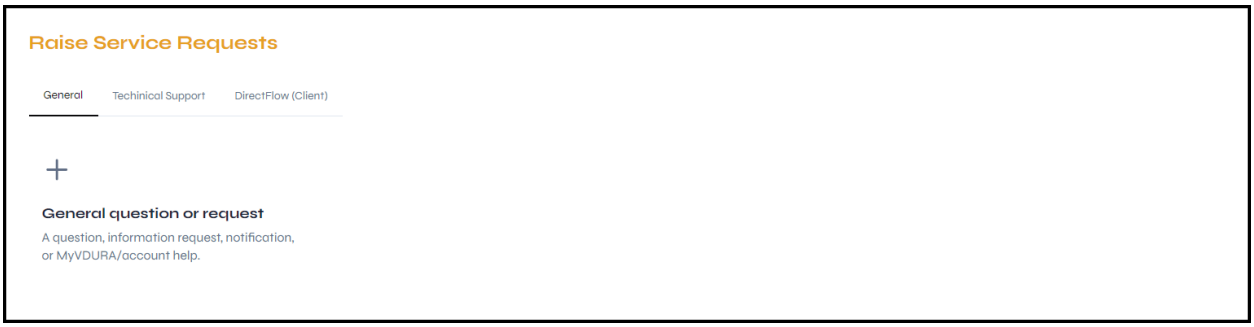


Figure 7.1. The General tab.

7.2 The Techinical Support Tab

The **Techinical Support** tab has six request types:

Request type	What it is for
Configuration or setup help	Help configuring your system, such as NTP, authentication, networking, exports, and capacity balancing.
Software Upgrade or Patch	Requesting or getting help with a PanFS or VDURA software upgrade, downgrade, or patch.
Report a software crash	A process crashed or restarted, or the system hit a kernel panic.
Report a performance problem	The system is slow: throughput, latency, network, OSD, or metadata performance.
Report a data / filesystem issue	Problems with volumes, reconstruction, damaged or inaccessible files, or replication.
Report Hardware Failure/RMA	A part or node has failed: a node, power supply, battery, blade, or chassis.

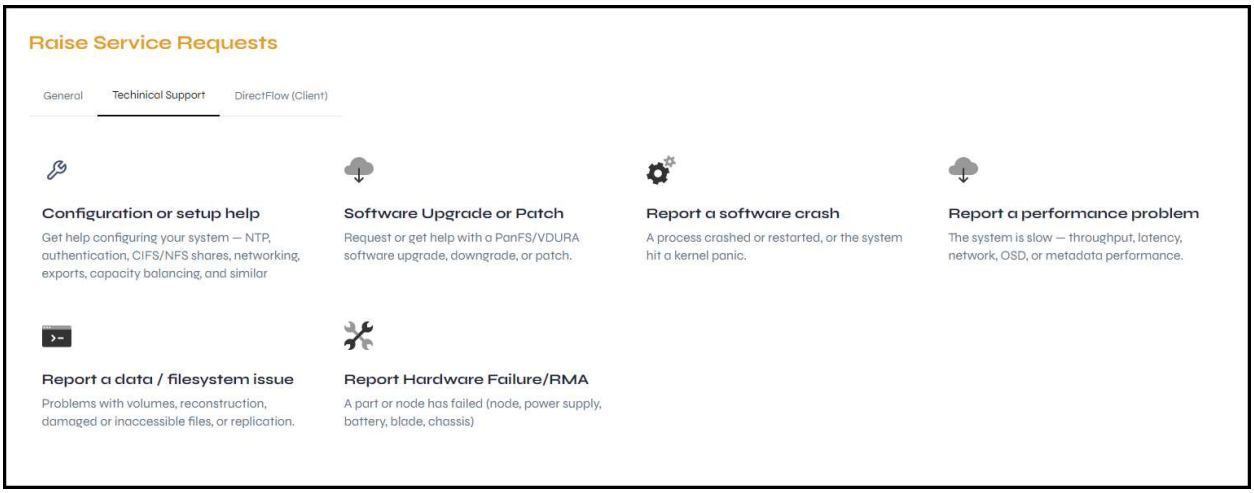


Figure 7.2. The Techinical Support tab.

7.3 The DirectFlow (Client) Tab

The **DirectFlow (Client)** tab has two request types:

Request type	What it is for
Request a DirectFlow port	Asking for a DirectFlow client build for a specific Linux distribution and kernel. See chapter 20.
DirectFlow client support	Help with the DirectFlow client on Linux, such as mounts, errors, and connectivity.



Figure 7.3. The DirectFlow (Client) tab.

8. Submitting a Request

VDURA addresses all customer and partner related technical questions for products under valid entitlement and/or current support contracts using our SR process. The portal is the fastest way to start one, and it is available 24x7.

8.1 Open a Request Form

1. On the home page, find **Raise Service Requests**.
2. Click the tab that matches your need: **General**, **Techinical Support**, or **DirectFlow (Client)**.
3. Click the tile for the request type. Its form opens in a pop-up window on top of the page.

8.2 The Request Form

A star after a field's name means the field is required.

The fields you may see are:

Field	What to enter
Summary field	One line describing the request. Its label differs by form (see 8.3).
Attach Systat	A sysstat file. See 8.5.
Description	Details of the request.
Priority	How urgent the request is. See 8.4. The General question or request form has no Priority field.
Serial Number	The serial number of the affected equipment. It appears only on the configuration form.

8.3 Request Types and Their Forms

The forms differ slightly. This table lists the fields on each. An asterisk means the field is required.

Request type	Summary field label	Attach Systat	Description	Priority	Serial Number
General question or request	General / information request*	Yes	Yes	Defaults to 2 - Major	No
Configuration or setup help	General / information request*	Yes	Yes	Yes*	Yes
Software Upgrade or Patch	General / information request*	Yes	Yes	Yes*	No
Report a software crash	Report a software crash*	Yes	Yes	No	No
Report a performance problem	Report a performance problem*	Yes*	Yes	Yes*	No
Report a data / filesystem issue	Summary*	Yes	Yes	Yes*	No
Report Hardware Failure/RMA	Report Hardware Failure/RMA*	Yes (labeled Attach Systat File)	No	Yes*	No
Request a DirectFlow port	Request a DirectFlow port*	Yes	No	Yes*	No
DirectFlow client support	DirectFlow client support*	Yes	Yes	Yes*	No

The pictures below show each form in full.

General Question or Request

Use this for general questions, information requests, system notifications, or portal and account help. Tell VDURA the product or area and your question. This form has no Priority field; the priority is set to 2 - Major.

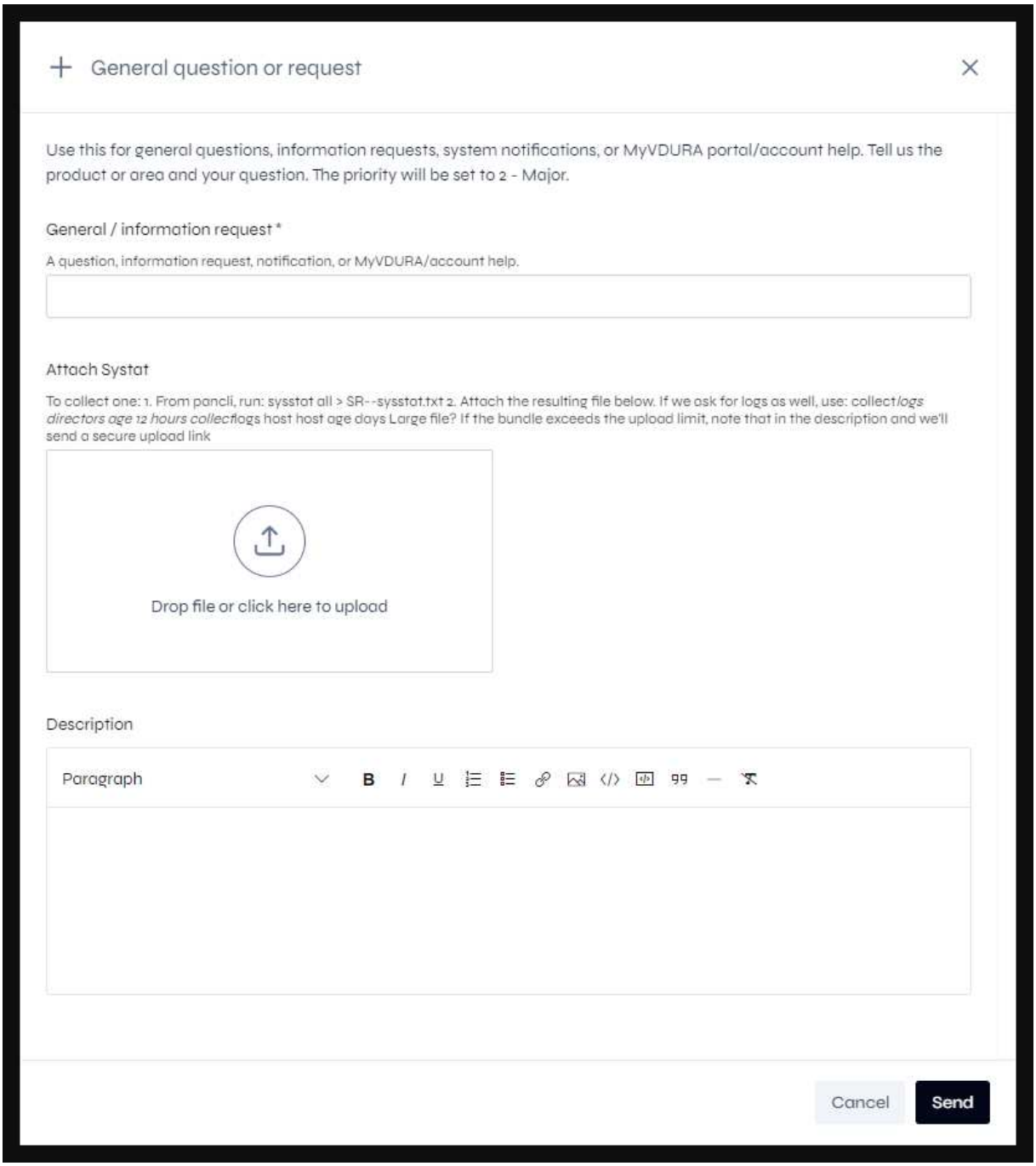


Figure 8.1. The General question or request form.

Configuration or Setup Help

Describe what you are configuring and the systems involved, and attach a sysstat if relevant.

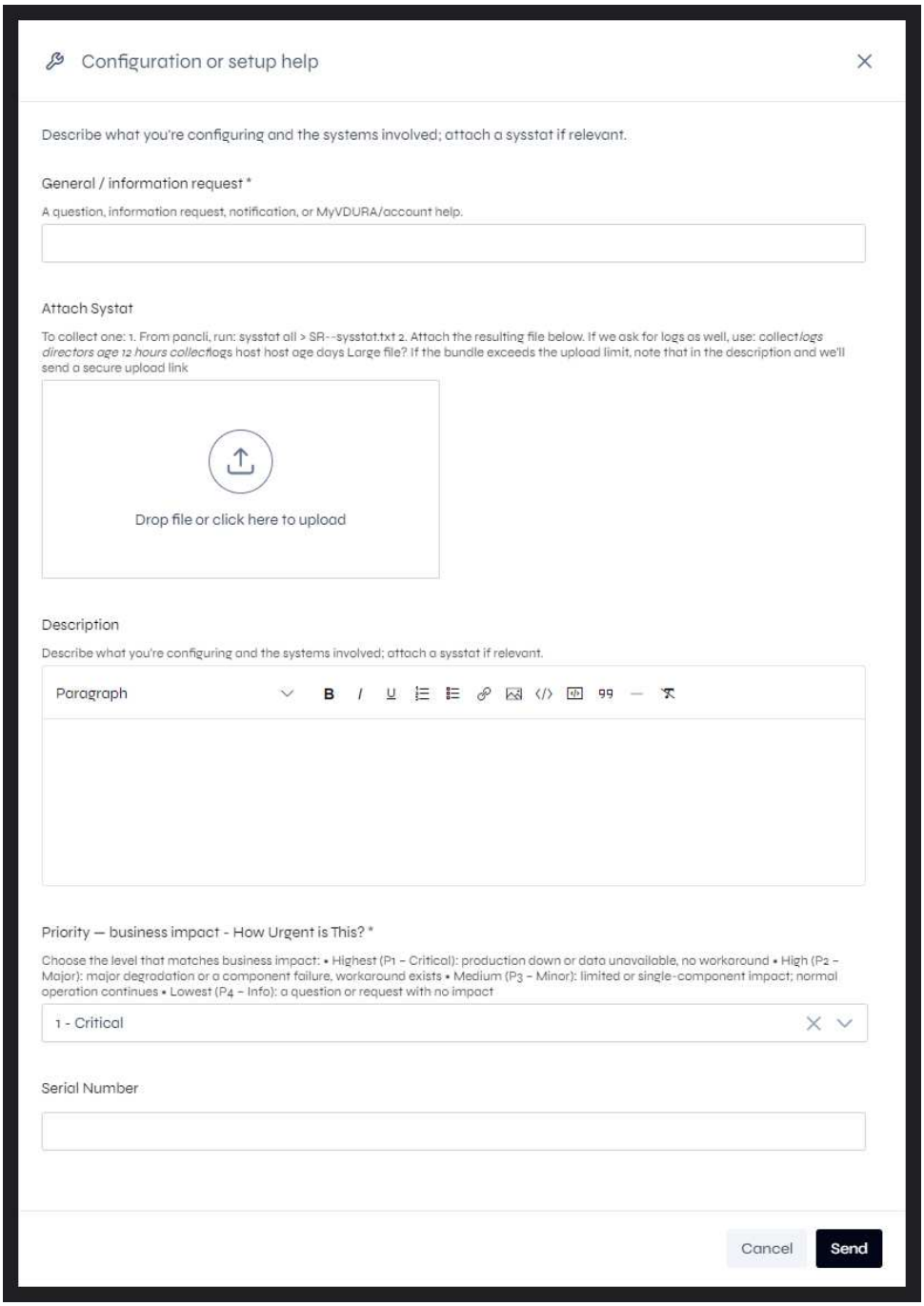


Figure 8.2. The Configuration or setup help form.

Software Upgrade or Patch

Tell VDURA your current version, your target version, and your preferred maintenance window, and attach a current sysstat. Before any upgrade, review the release notes for your target release in detail, so that you are aware of any issues for that specific release (see chapter 10).

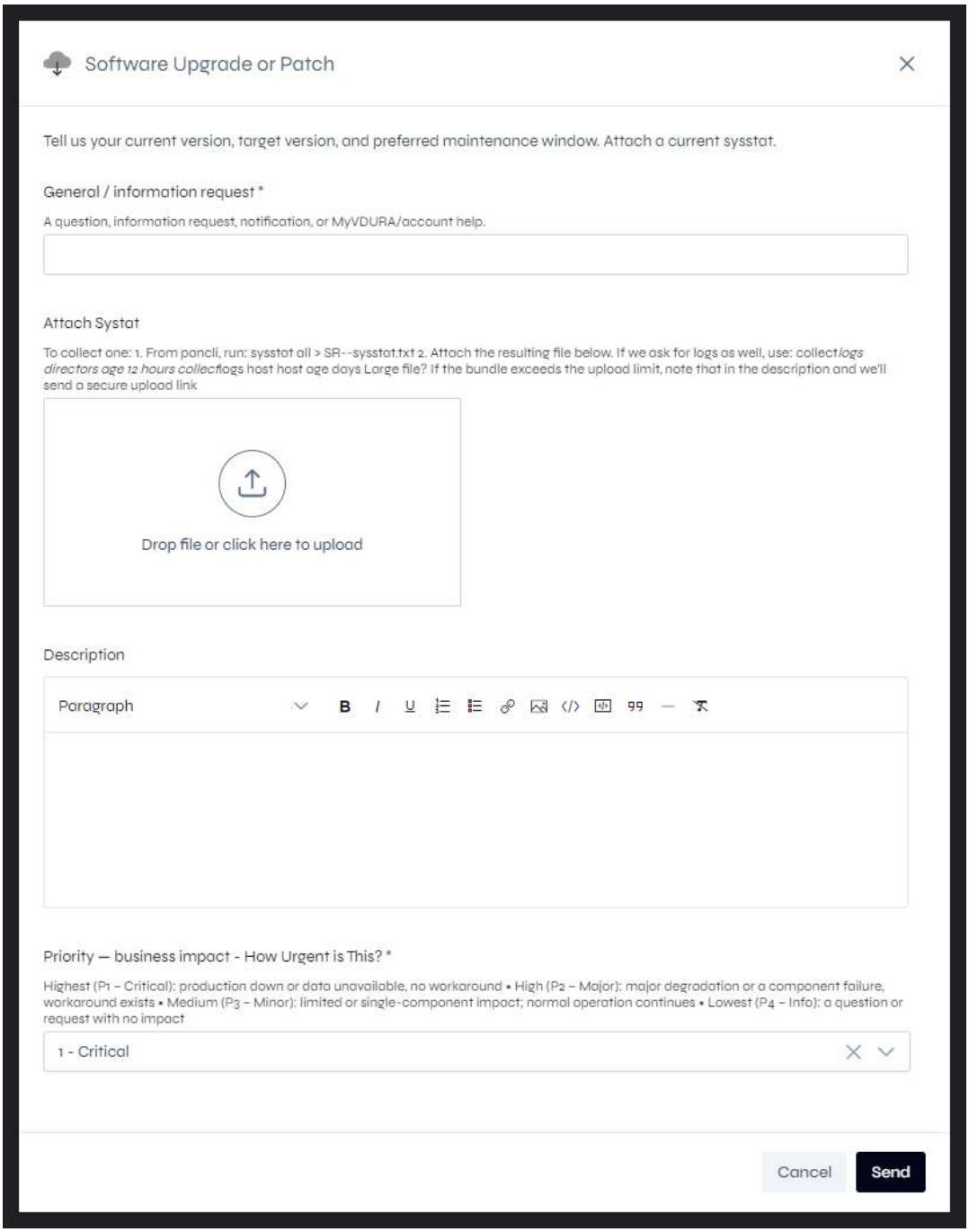


Figure 8.3. The Software Upgrade or Patch form.

Report a Software Crash

Use this to report a crash, core, process restart, or kernel panic. Describe what happened and when, and attach the sysstat and any core files. This form has no Priority field.

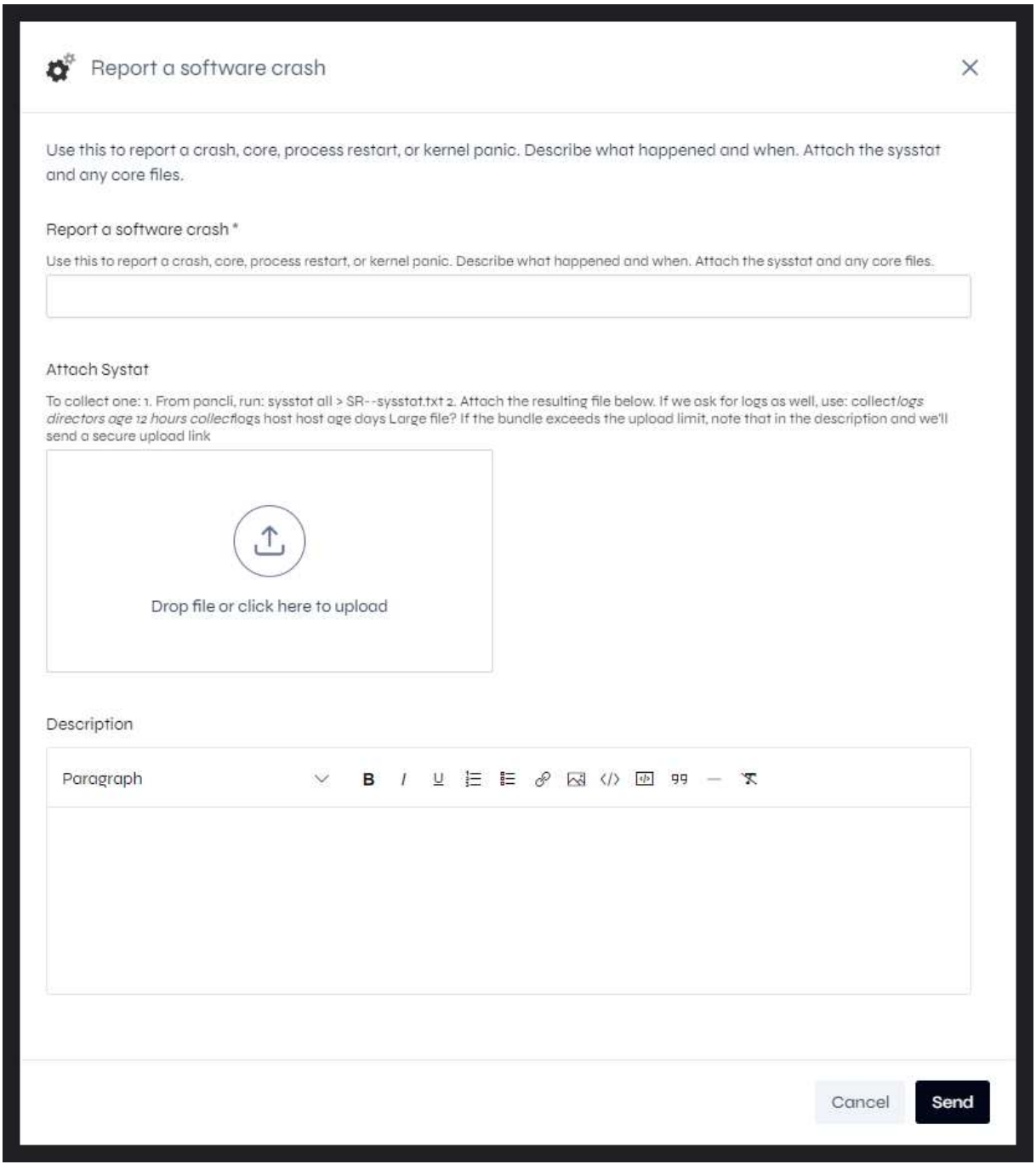


Figure 8.4. The Report a software crash form.

Report a Performance Problem

Describe the symptom (when it started and what is slow) and the workload and context (clients, job type, timeframe). The sysstat is required here, so that VDURA can analyze load.

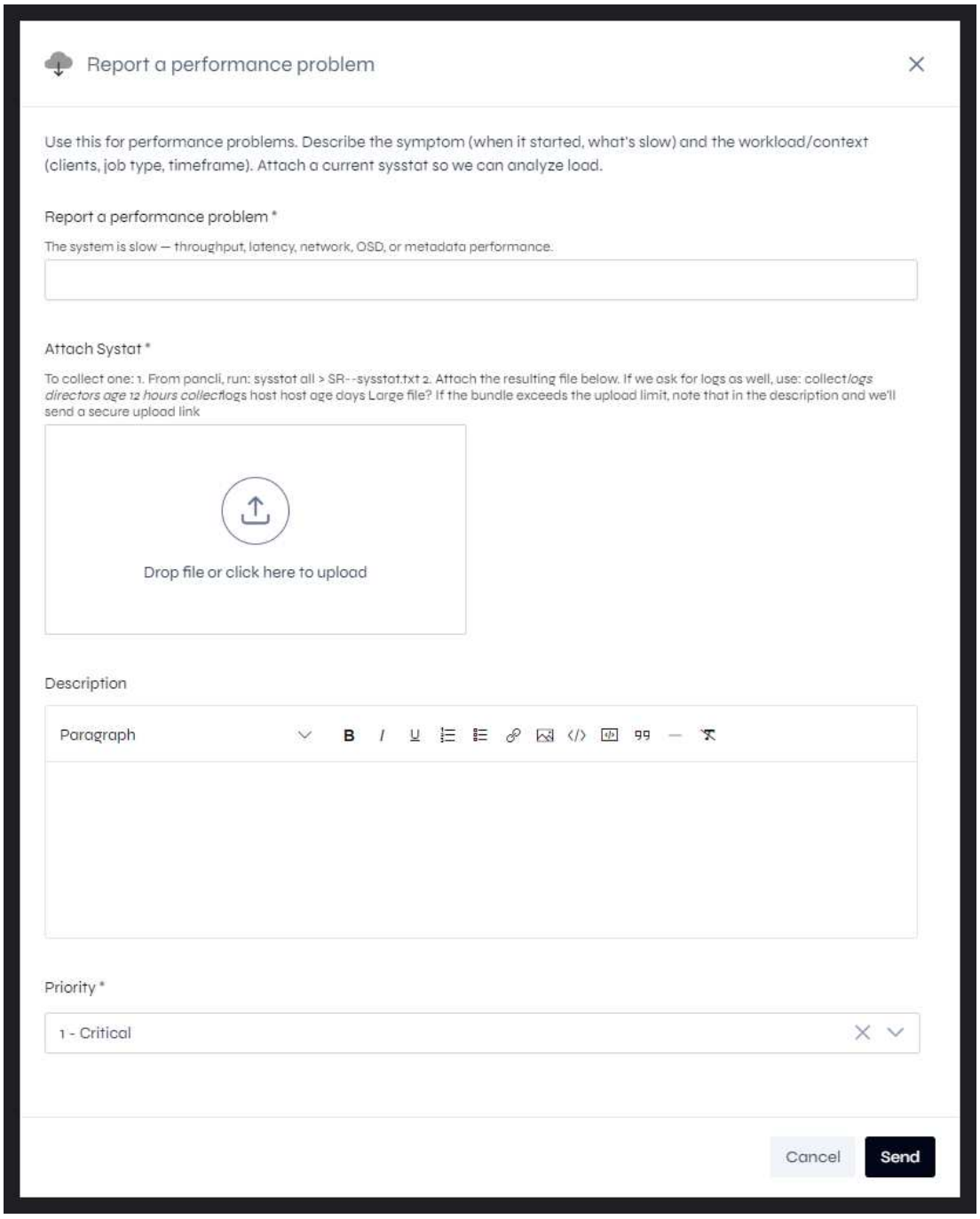


Figure 8.5. The Report a performance problem form.

Report a Data / Filesystem Issue

Use this for failed reconstruction, damaged or inaccessible files, volume failover, FSRC, or replication. Describe what you see and list the affected volumes or paths. The form text says a current sysstat is required so that VDURA can begin immediately, although the **Attach Systat** field is not marked with an asterisk.

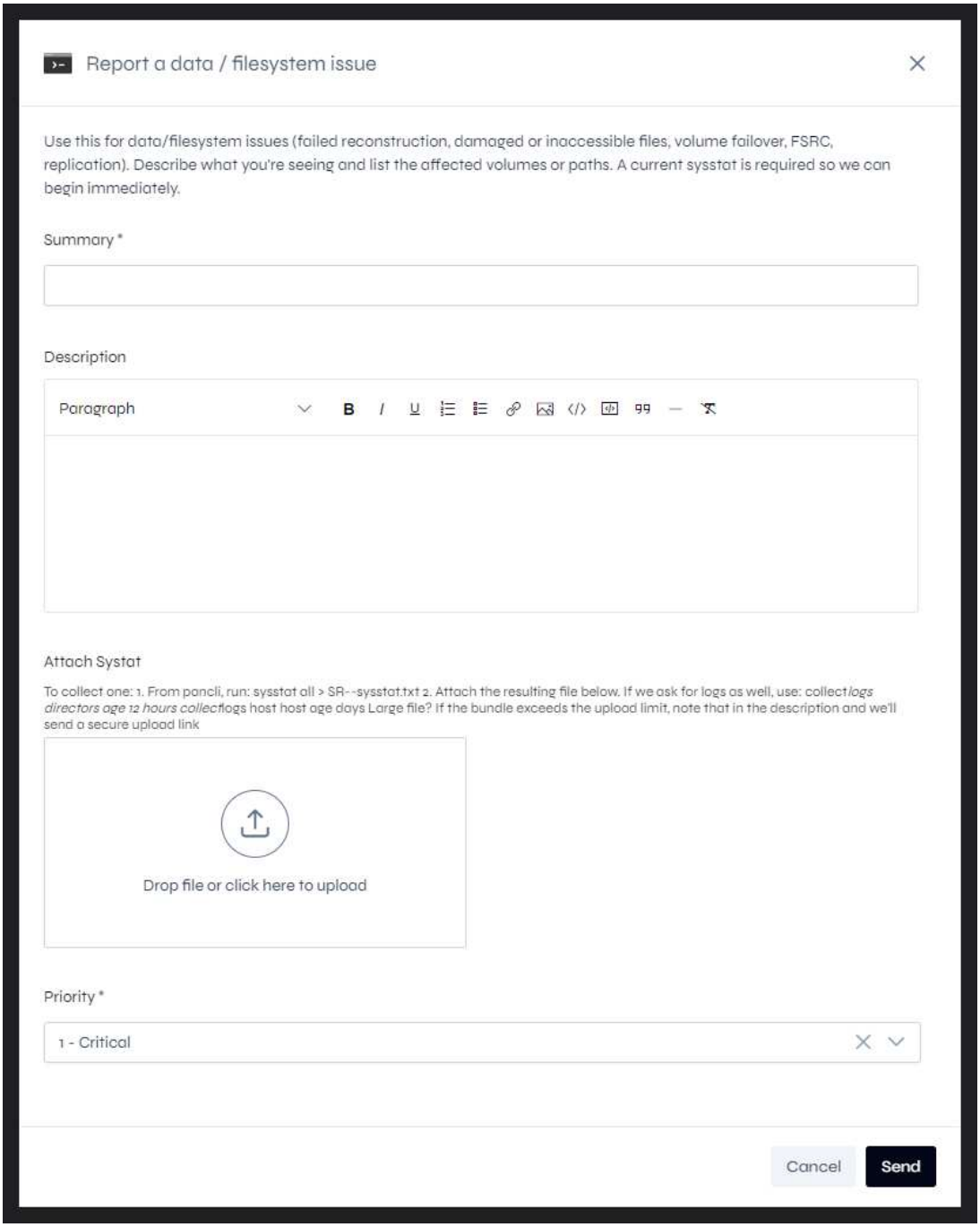


Figure 8.6. The Report a data / filesystem issue form.

Report Hardware Failure/RMA

Use this when a part or node has failed. This form has no Description box; the summary field and the sysstat carry the report. To process an RMA, VDURA needs the failed part's serial number and the delivery address (see chapter 14).

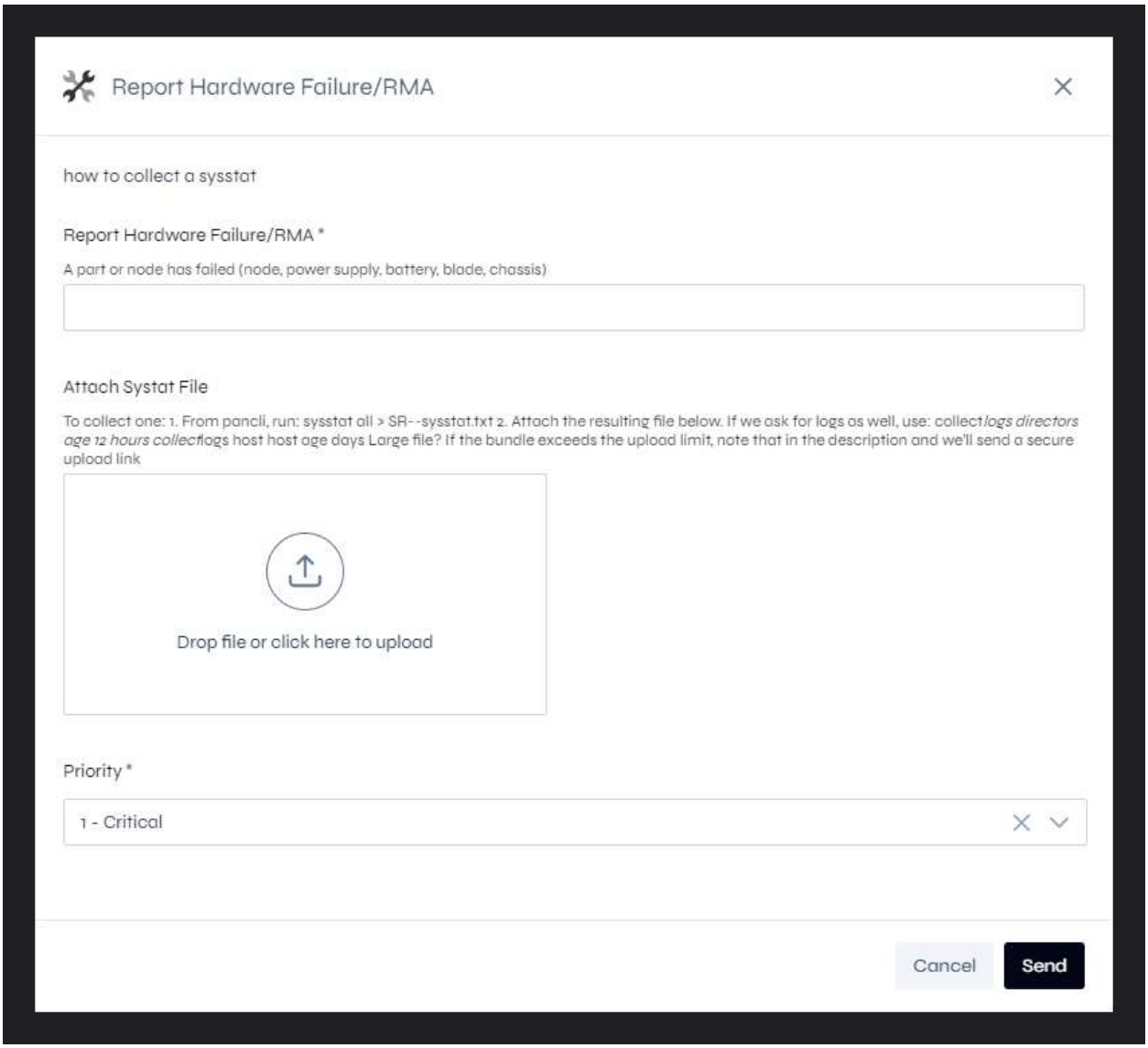


Figure 8.7. The Report Hardware Failure/RMA form.

Request a DirectFlow Port

Use this to request a DirectFlow client build for a new Linux distribution or kernel. Provide the exact distribution and kernel version and when you need it. This is a build request, not a fault report.

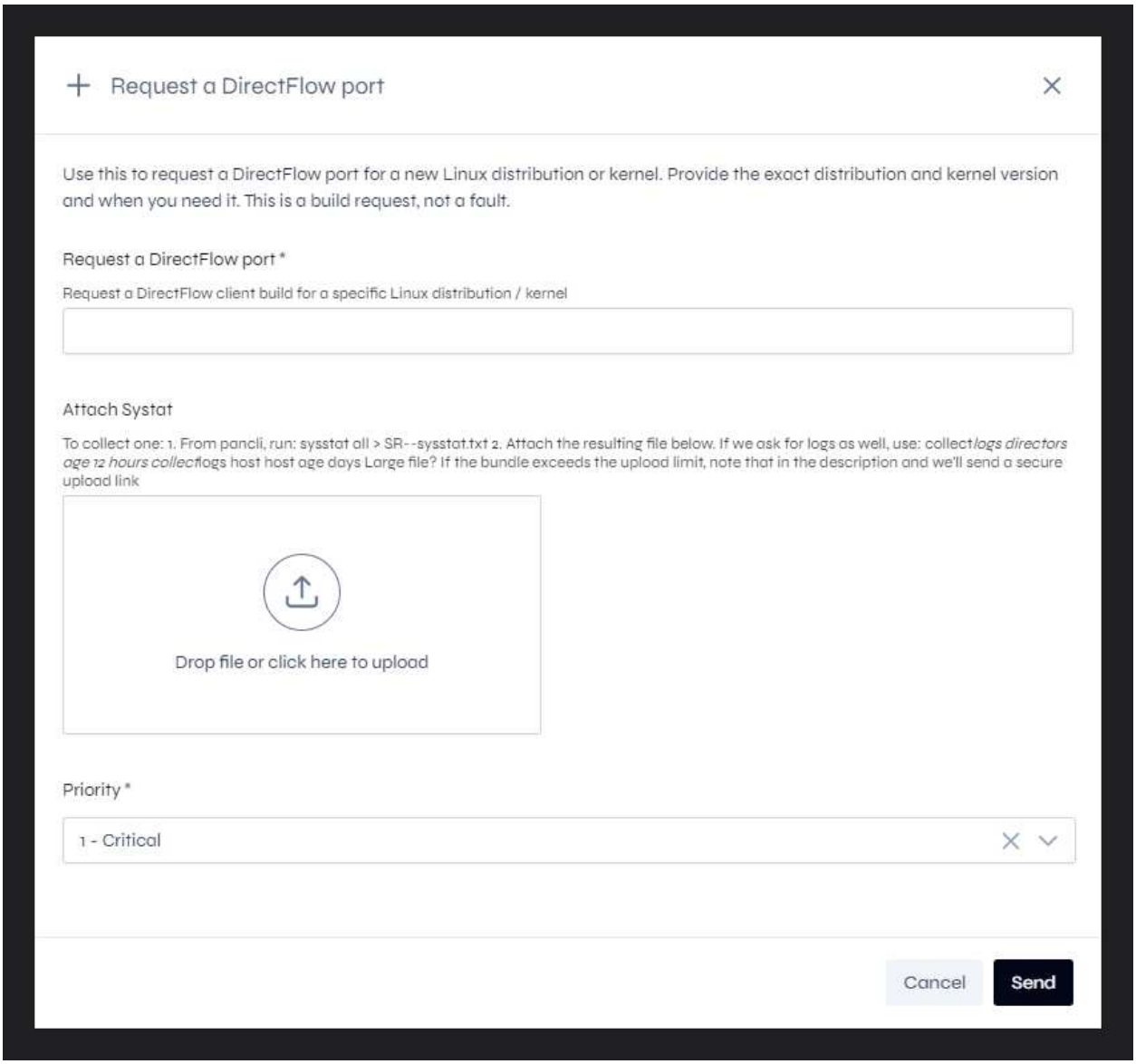


Figure 8.8. The Request a DirectFlow port form.

DirectFlow Client Support

Tell VDURA your Linux distribution and kernel version, describe the problem, and attach relevant client logs.

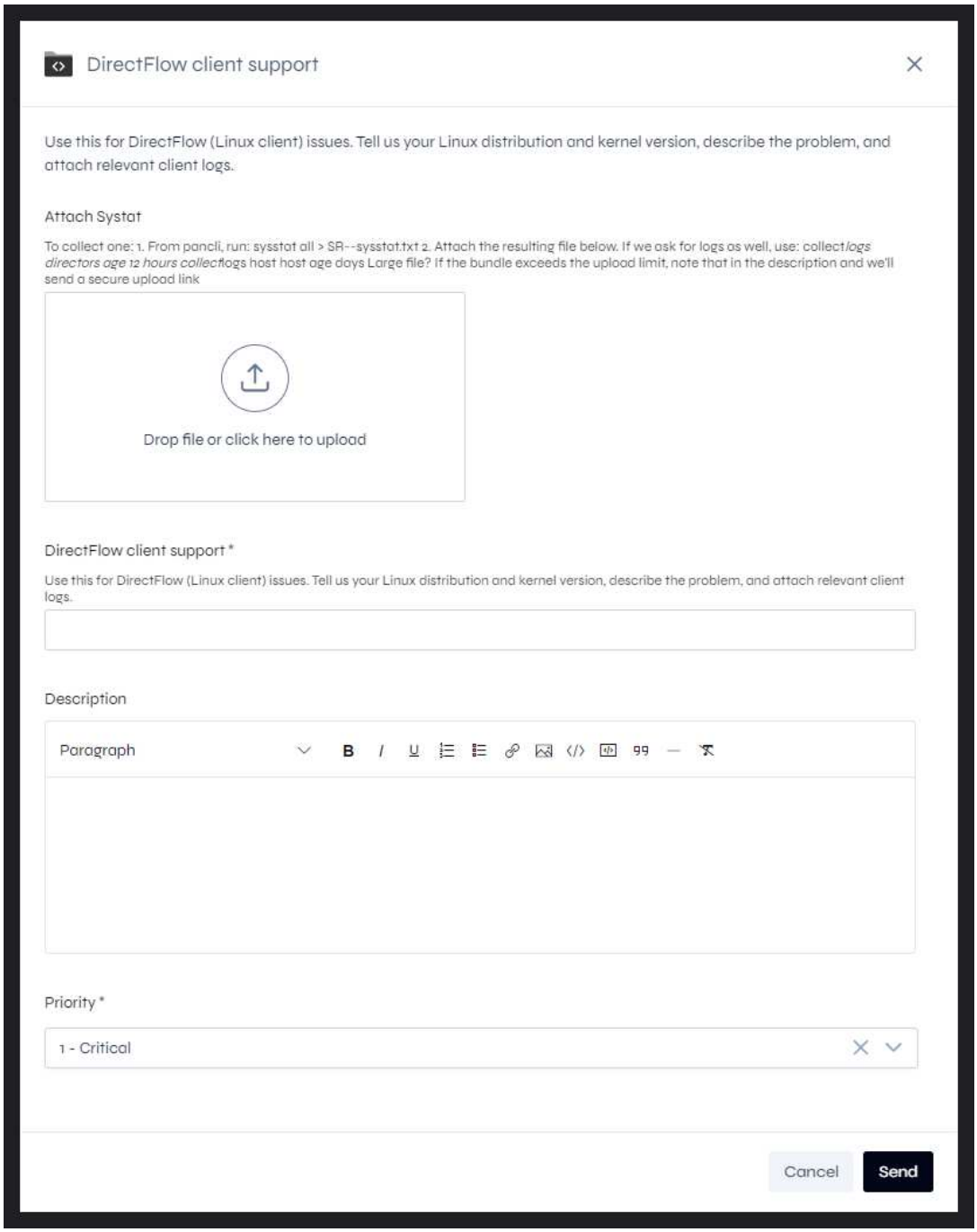


Figure 8.9. The DirectFlow client support form.

8.4 Choosing a Priority

When you open a new SR, you must set the appropriate priority to reflect the impact of the issue on your environment. **The Priority drop-down starts at "1 - Critical" on every form that has it**, so check it before you send. The drop-down offers four choices: "1 - Critical", "2 - Major", "3 - Minor", and "4 - Information Request". The levels are:

Level	Business impact	Typical situations
Priority 1: Critical	Critical business impact	The product does not start or boot up. Data appears to be in danger of being lost or damaged. Data volumes are inaccessible, or product use stops.
Priority 2: Major	Significant business impact	The product fails to work as designed for a significant feature, causing a major restriction to product use. System performance is degraded by a significant amount. The product requires a major intervention to work around the problem.
Priority 3: Minor	Some business impact	The product fails to work as designed for a minor feature, causing a slight restriction to product use. System performance is degraded to some degree. A workaround is available, but it is not the desired solution. The product routinely reports erroneous messages or errors.
Priority 4: Information Request	No business impact	General questions about the product. New features or requested enhancements.

These descriptions are guidelines for setting the priority. VDURA's response commitments depend on the priority you choose (see 13.3).

8.5 Collecting and Attaching a Sysstat

A **sysstat** is a file of system information that helps VDURA engineers analyze your system. To collect one:

1. From `pancli`, run `sysstat all` and save the output to a file, for example `sysstat all > SR-<your-SR-number>-sysstat.txt`.
2. Attach the resulting file by dropping it on the **Attach Systat** box or by clicking the box and choosing the file.

If VDURA also asks for logs, it will tell you which `collect_logs` command to run. If the bundle is larger than the upload limit, say so in the **Description**, and VDURA sends you a secure upload link. See 13.5 for more about both commands and about uploading large files.

8.6 Send the Request

1. Fill in the required fields (marked with a star).
2. Check the **Priority**.
3. Click **Send**.

Click **Cancel** or the X in the corner to leave without raising the request. After a request is raised, it appears in your request list (see chapter 9). You can also submit a request by calling the toll-free phone number in 3.3.

When you click **Send**, the pop-up closes and a green "Request created" message appears in the top-right corner for a few seconds. It gives the new request's number, for example "You have created SR-2998", with a link to the request, and says that you can find all your active and past requests in the user menu, under **Requests**. The new request's status starts as **Unassigned**. A file you attached in **Attach Systat** is listed in the request's **Attachments** panel and appears in its activity as a file from you.

9. Tracking Your Requests

This chapter covers Request Tracking on the Home Page, The Requests and Approvals Pages, and A Request's Details.

9.1 Request Tracking on the Home Page

The **Request tracking** section on the home page lists your requests (on the Service Request Hub page the same table is headed **My open requests**). A **Filter by** row narrows the list:

Filter	What it does
Service Desk	Chooses which service desk's requests to show, from a searchable checklist. There is one, **Service Request Hub**.
Request Status	Starts on **Open Requests**. The other choices are **Any Status** and **Closed Requests**.
Request Type	Starts on **All Request Types**. Choose one request type from a searchable list.
Created by	Starts on **Created by Me**. The other choices are **Created by Anyone**, **Where I am a participant**, and **Shared with my organizations**.
Search...	Type text to find requests whose content matches.

The table shows each request's reference (such as SR-2946), summary, requester, created date, and status. The status is a colored label such as **PENDING CUSTO...**; long status names are cut off with an ellipsis, so **Pending Customer Action** reads that way. See 13.7 for what each status means.

The table shows five requests at a time. Use the arrows below it to move between pages; the page control shows only the page you are on. If a filter matches nothing, the table says "No requests found with these filters" and offers a **Reset filters** button.

Click a request's reference to open it (see 9.3).

9.2 The Requests and Approvals Pages

The account menu links to two fuller lists (see 12.1).

The **Requests** page has the same filters and columns as **Request tracking**, with one difference: **Created by** starts on **Created by Anyone** instead of **Created by Me**.

> **Note:** The lists show only requests created in the support portal. Service requests opened before the move were not migrated. VDURA can still look up earlier service requests for a period of time, so ask Technical Support if you need information from one.

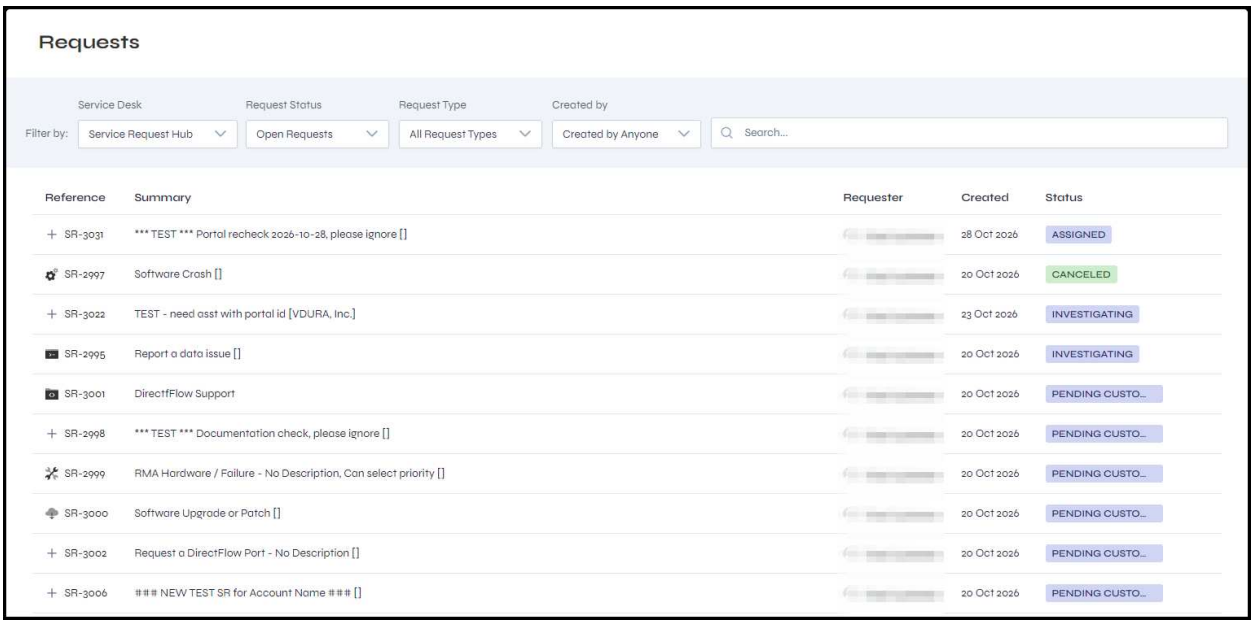


Figure 9.1. The Requests page.

The **Approvals** page lists requests that are waiting for your approval. Its filters are **Service Desk**, **Approval Status** (it starts on "Waiting for my approval"; the other choice is "Approvals history"), **Request Type**, and **Search...**. When nothing is waiting, it reads "No requests found".

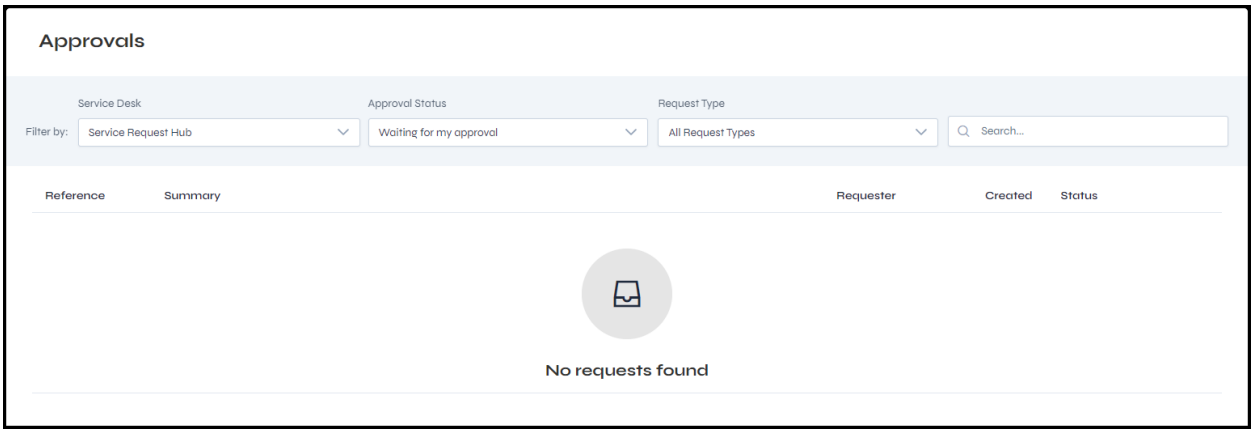


Figure 9.2. The Approvals page.

9.3 A Request's Details

A request's page shows the request in full. A breadcrumb at the top, such as "Service Request Hub > SR-2946", leads to the Service Request Hub page (see 6.3).



Figure 9.3. A request's detail page.

The main area shows the request's description and priority, then its activity, meaning comments and status notes such as "Your request status changed to Pending Customer Action, 3 days ago". A comment can carry an attached file, shown as a paperclip and the file name above the comment text. When a request has many comments, a **Load remaining N activities** button loads the rest.

To add a comment, click **Add a comment...**. To send a file to VDURA after a request is raised, click **Add Attachment** in the comment editor, choose the file, and click **Post comment**. The file appears on your comment and in the **Attachments** panel.

All phone conversations, case updates, emails, and remote troubleshooting sessions are documented using the SR process. You receive an email copy of all updates, you can reply to those emails to respond on your Service Request, and you can review the entire case history at any time in the portal.

The panel on the right shows:

Item	What it shows
Status	The request's current state. Long names are cut off with an ellipsis, such as **PENDING CUSTOMER ACTI...**.
People involved	Everyone on the request. The person who raised it is labeled **CREATOR**, and others are labeled **PARTICIPANT**.
Notification bell	The round bell button beside the status turns notifications for this request off (the bell is crossed out) and back on.
Created	How long ago the request was created, and, once it has changed, how long ago it was last updated.

Item	What it shows
Attachments	The files attached to the request, including files attached to comments. It is a list only; it has no upload button.

10. Service Advisories, Release Notes, and Product Documentation

The bottom of the home page has three sections, each with a button that opens a page of files.

Section	What its page holds
Service Advisories	Service advisory PDFs.
Release Notes	Release note PDFs, one per release.
Product Documentation	Product guides, such as installation and service guides, command reference guides, user guides, and end-of-availability notices.



Figure 10.1. The Service Advisories page.

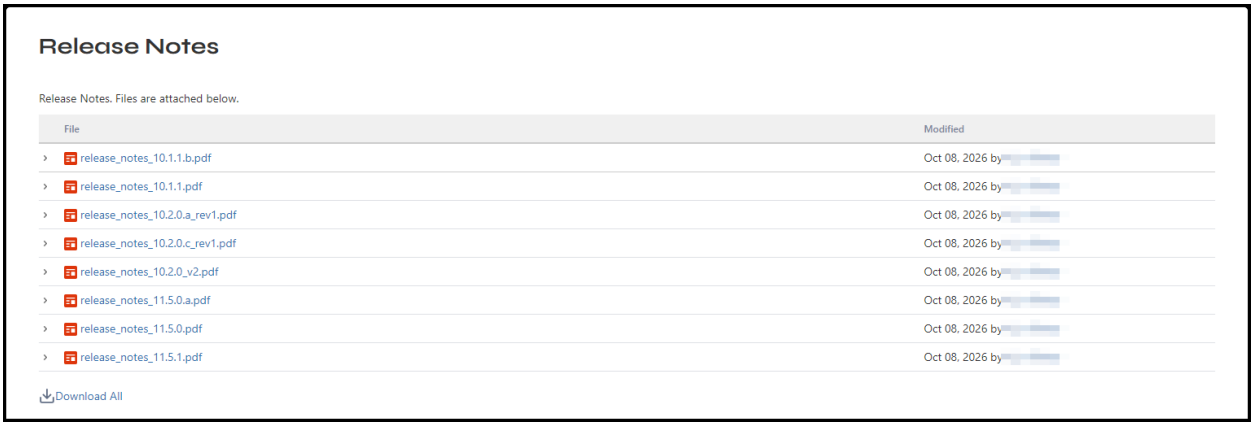


Figure 10.2. The Release Notes page.

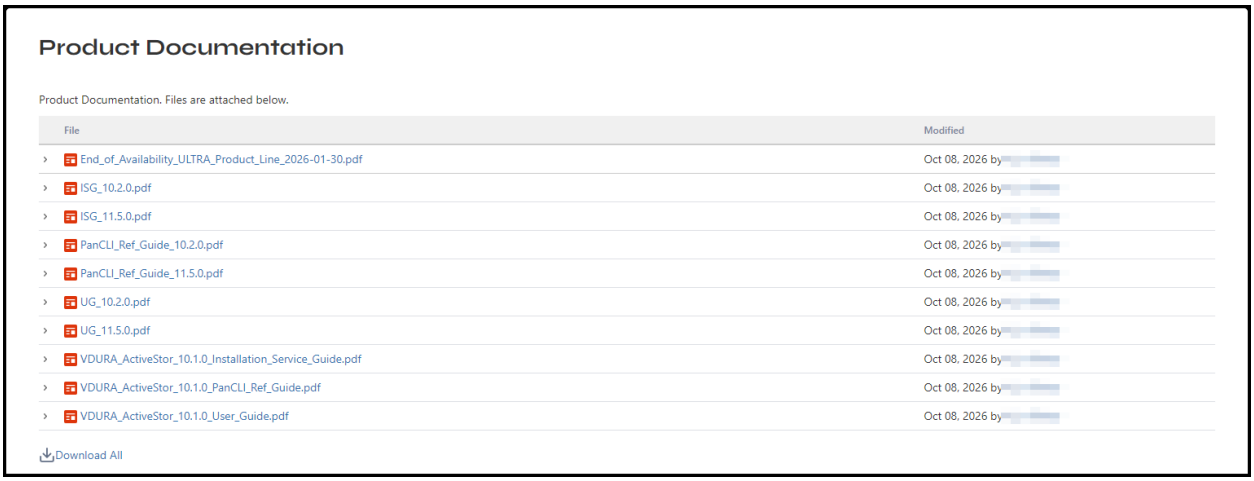


Figure 10.3. The Product Documentation page.

Each row shows a file's name, as a link, and when and by whom it was last changed. Click a file's name to download it; it goes to your browser's Downloads folder and does not open in the browser. A **Download All** link sits under the table for downloading all of the files on the page at once. The file lists change as VDURA publishes new material. To leave a file list, click **Service Request Hub** in the top bar, which opens the Service Request Hub page (see 6.3).

10.1 Service Advisories

Periodically, VDURA Global Services publishes Service Advisories to notify users regarding specific product, software version, or customer-wide usability issues that need rapid dissemination. Check the **Service Advisories** page from time to time.

10.2 Release Notes

Always review the release notes in detail before beginning any type of storage upgrade, to ensure you are aware of any issues for that specific release.

10.3 Product Documentation and End of Availability Notices

The **Product Documentation** page lists customer-facing VDURA product documentation. VDURA End of Availability (EoA) announcements are also posted there. Customers and partners should periodically check this page for product EoA announcements (see 15.1).

11. Searching

This chapter covers Search the Portal.

11.1 Search the Portal

1. Click the search icon in the top bar.
2. Type a word or phrase.
3. Choose a tab: **Pages** or **Raise a Request**.

The drop-down at the top right of the pop-up sets where to search. The **Search...** box in the banner of the home page opens the same pop-up, with your words already in it.

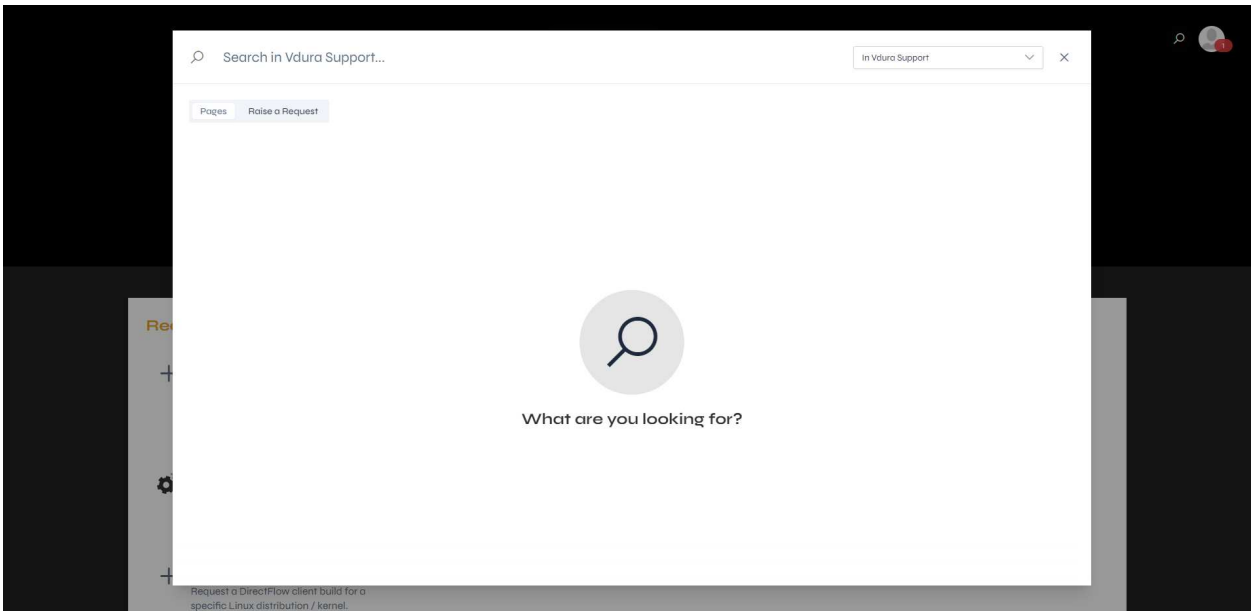


Figure 11.1. The search pop-up.

The **Raise a Request** tab lists matching request types, with your search word in bold in their descriptions.

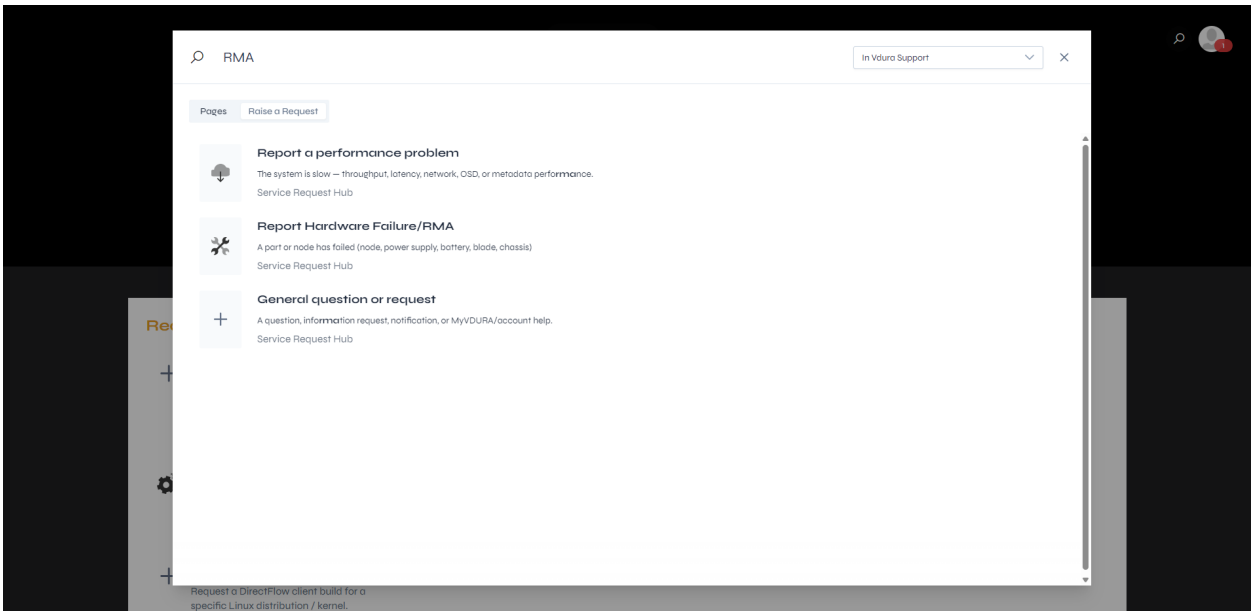


Figure 11.2. The Raise a Request results for “RMA”.

Search matches letters inside words as well, so a search for “RMA” also matches “performance” and “information”.

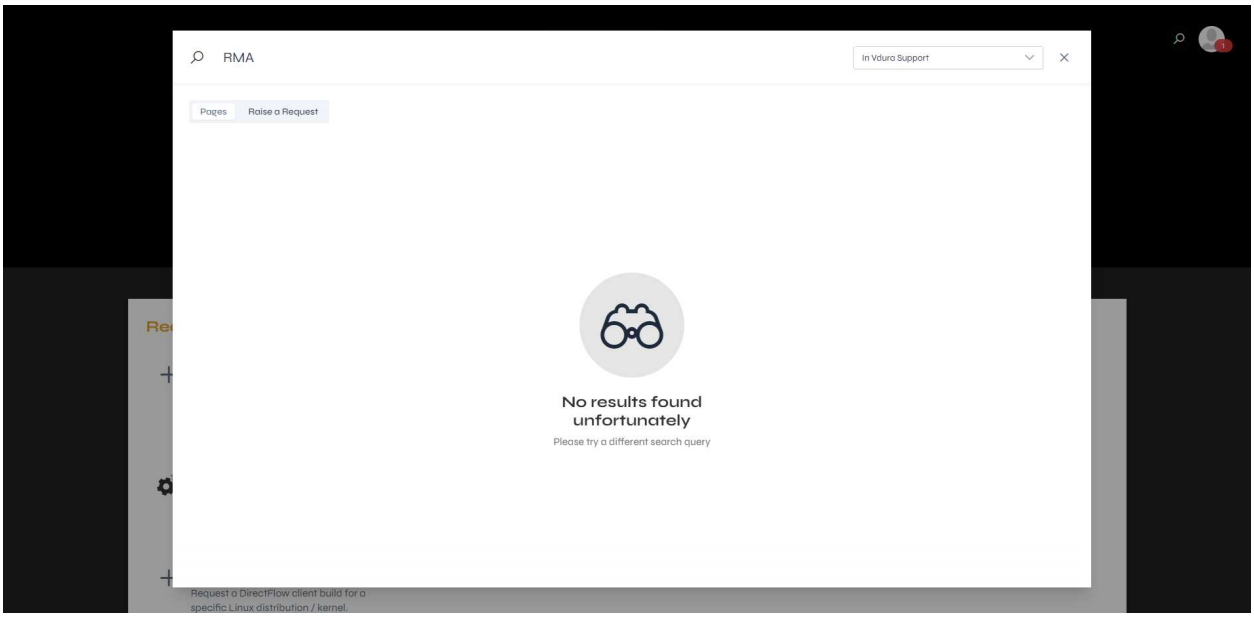


Figure 11.3. The Pages tab with no results.

12. Your Account

This chapter covers The Account Menu, Your Profile, and Software Downloads.

12.1 The Account Menu

Click the account icon in the top-right corner to open the account menu. When there are requests for you to review, the icon carries a small red badge with their number (it reads 9+ when there are more than nine).

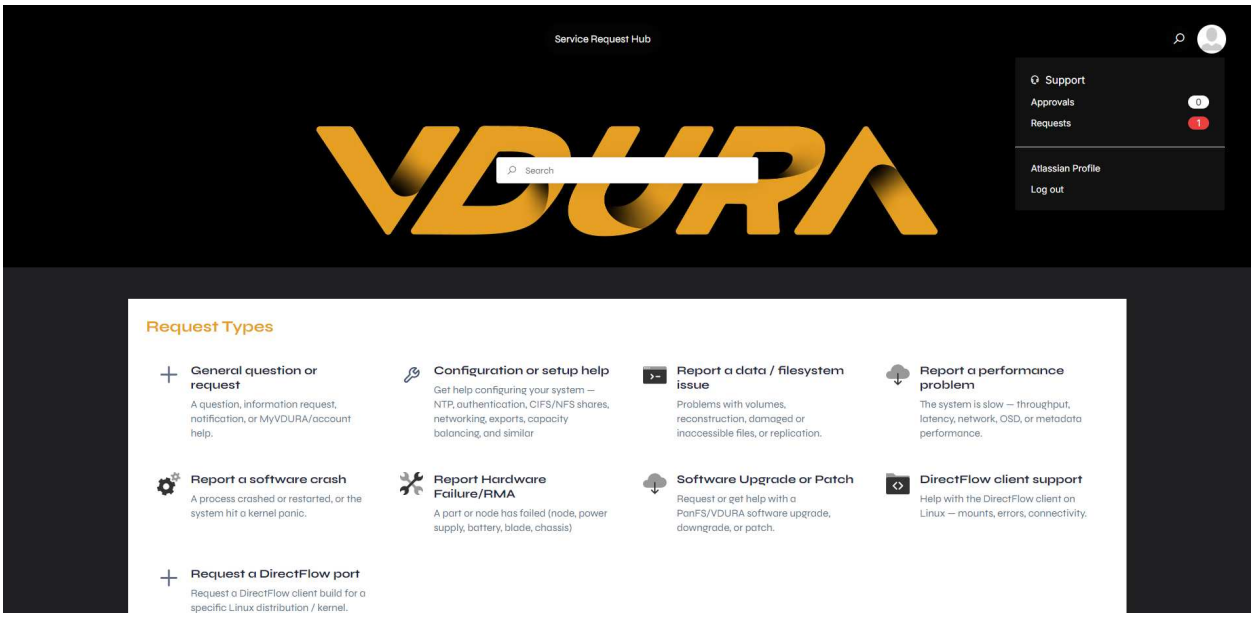


Figure 12.1. The account menu.

Item	What it does
Approvals	Opens the Approvals page (see 9.2). The badge counts approvals waiting for you.
Requests	Opens the Requests page. The badge counts your requests.
Atlassian Profile	Opens your profile (see 12.2).
Log out	Signs you out.

12.2 Your Profile

Atlassian Profile opens a **Profile** page. It is titled “Vdura Support Portal / Profile” and has its own look, which differs from the rest of the portal. A blue note says: “Your changes may take up to five minutes to appear. If you log in with single sign-on, your name will be automatically updated to match the single sign-on provider.”

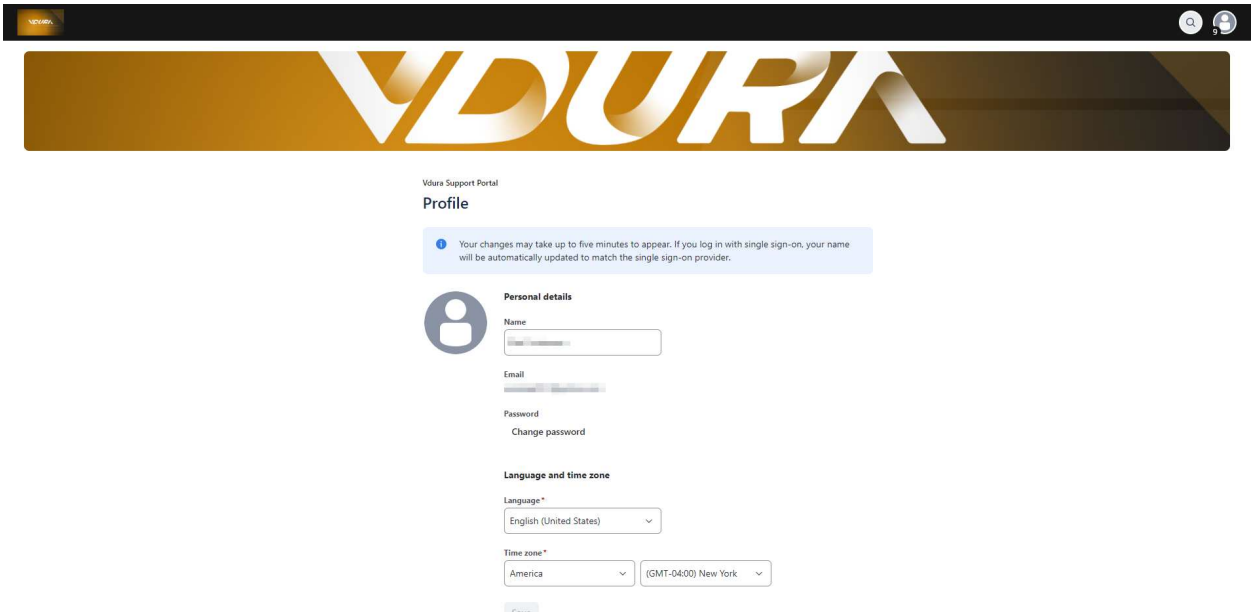


Figure 12.2. The Profile page.

Section	Field	Notes
Personal details	**Name**	You can edit it.
Personal details	**Email**	Shown as text.
Personal details	**Password**	**Change password** changes your password.
Language and time zone	**Language**	Required. A drop-down of languages, for example “English (United States)”.
Language and time zone	**Time zone**	Required. Two drop-downs, a region and a zone, for example “America” and “(GMT-04:00) New York”.

Save is greyed out until you change something.

To change your time zone:

1. Open **Atlassian Profile** from the account menu.
2. Under **Time zone**, choose a region and then a zone.
3. Click **Save**.

12.3 Software Downloads

Below **Save**, the **Profile** page has a **Software downloads** section. Its intro line reads “Software available to VDURA, Inc.. Each Download link is created when you click it and works for 10 minutes.” The list can take a few seconds to appear after the page opens. It has three tabs:

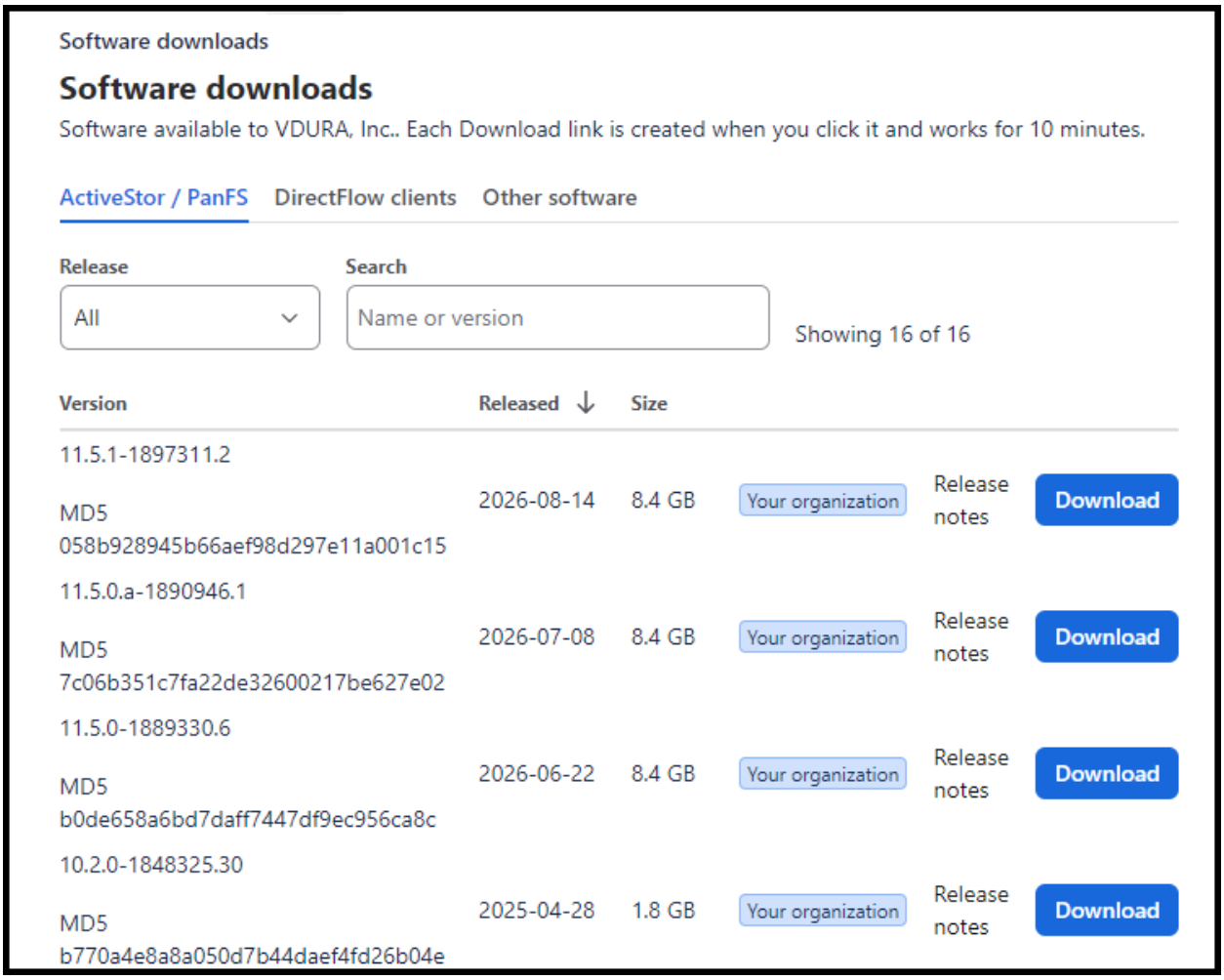


Figure 12.3. The Software downloads section.

Tab	Filters	Columns
ActiveStor / PanFS	**Release** drop-down and **Search** box (name or version)	**Version**, **Released**, **Size**
DirectFlow clients	**Operating system** and **Release** drop-downs, and **Search** box	**Operating system**, **Kernel**, **Client version**, **Released**
Other software	**Release** drop-down and **Search** box	**Software**, **Type**, **Version**, **Released**

Each row shows an MD5 checksum under its version and a **Download** button. Rows that have release notes show a **Release notes** link. On the **ActiveStor / PanFS** tab, rows also carry a **Your organization** label, which means the software is available to your organization. A line above the table says how many items match, for example "Showing 16 of 16". **Release notes** opens the release notes PDF in a new browser tab. The **Release** drop-down lists release lines such as 11.5, 10.2 and 9.3, and choosing one narrows the list. The **Operating system** drop-down on the **DirectFlow clients** tab lists Linux distributions and versions, and the DirectFlow list shows 20 rows per page, with **Previous Page**, numbered page and **Next Page** buttons below it. The **Other software** tab holds items such as switch firmware, PanMove, and utilities.

The **Profile** page has its own account menu in the top-right corner. It lists **Requests** (with a badge), **Software downloads**, **Profile** and **Log out**. The **Software downloads** item opens the same three tabs in a pop-up window over the page, which you close with the X. The account menu on the rest of the portal (see 12.1) has no **Software downloads** item.

To download software:

1. Open **Atlassian Profile** from the account menu.
2. Scroll to **Software downloads**, or click the account icon on the **Profile** page and choose **Software downloads** to open it in a pop-up window.
3. Choose a tab and narrow the list with the filters or the **Search** box.
4. Click **Download** on the row you want. The file downloads to your computer.

The **Download** link is created when you click it and works for 10 minutes, so click **Download** again if you need the file later.

13. Service Request (SR) Handling and Escalation

This chapter covers the following topics.

13.1 Case Handling

VDURA addresses all customer and partner related technical questions for products under valid entitlement and/or current support contracts using our SR process.

- TSEs open and update SRs, while you use the Support Portal or the toll-free phone support line.
- All phone conversations, case updates, emails, and remote troubleshooting sessions are documented using the SR process. You receive an email copy of all updates, can reply to those emails to respond on your Service Request, and can review the entire case history at any time using the portal.
- Once VDURA and the customer or partner agree the issue is resolved, we will close the case.

SR Resolution Flow

1. You submit a new SR through the Support Portal or by calling the toll-free phone number. Both are available 24x7.
2. VDURA Customer Service creates the SR and performs the initial triage and assignment. A Level 2 TSE does this for direct customers, and a Level 1 partner does this for customers supported through a partner.
3. A Level 2 TSE troubleshoots the issue with you.
4. If needed, a Level 3 TSE provides advanced troubleshooting for internal technical escalations. Level 2 and Level 3 TSEs work together.
5. If the issue requires it, Level 4 hardware and software engineering gets involved for SRs that need bug fixes, and a Solution Architect is dispatched for onsite troubleshooting.
6. VDURA and you update the SR, or VDURA issues an RMA.
7. When the issue is resolved, we close the SR.

At any point, you can ask for an escalation, which brings in more senior staff on a set schedule (see 13.4).

13.2 Priority Levels

The priority you set when you open an SR reflects the impact of the issue on your environment. The levels and their descriptions are in 8.4.

13.3 Response Times

After an SR has been submitted to VDURA, the next steps are directed by VDURA service level response commitments. Our commitments are designed to help the Customer Service team drive SRs to a prompt conclusion. The first objective is either to answer the initial call immediately or provide a call back within 15 minutes. Should you submit an SR through the portal, you should expect immediate confirmation that the case was successfully logged into our case management system. Our follow-on service level responses, timeliness of the initial technical contact, SR update frequency, and troubleshooting efforts are dependent on the SR priority and SR status categories below:

SR priority	Initial technical contact	SR update frequency (status = Assigned)	Troubleshooting effort
Priority 1: Critical	Less than 1 hour	Every 12 hours	Continuous 24x7
Priority 2: Major	Less than 4 hours	Every 1 business day	As needed
Priority 3: Minor	Less than 1 business day	Every 5 business days	As needed
Priority 4: Information Request	Less than 2 business days	Every 30 business days	As needed

13.4 Service Request Escalations

Should you feel that an SR is not progressing in a reasonable fashion toward closure for either technical or case management reasons, you may request an escalation of the case.

- Escalation of SRs can be done through the portal or by calling the Customer Service phone line. Once an escalation occurs, the event is logged into the case and the VDURA management team will contact you to develop a detailed plan of action to drive the SR to closure.

- When a customer initiates an SR escalation, the SR is updated to reflect this fact and the following processes are followed:

Escalation level	Event	Escalation point	Response time	Action
1	Customer requests initial escalation	Sr. Support Engineer	Within 2 hours	Action plan developed and agreed upon
2	Second escalation	Service Manager/Director	Within 4 hours	Revised action plan developed and agreed upon with the customer's executive team
3	Third escalation	Director/VP Engineering	Within 8 hours	Service Request resolution plan

13.5 Gathering Troubleshooting Information

There are two main commands VDURA Technical Support uses to gather initial troubleshooting information: `sysstat all` and `collect_logs`. Both of these commands are issued using PanCLI, the VDURA Command Line Interface (`collect_logs` can also be run through PanAPI and PanCTL, as described below). Both commands also have equivalents in the VDURA Management Console GUI.

- **`sysstat all`:** Provides an overall VDURA system summary. Examples of output include Director Node CPU utilization, OSD disk and CPU utilization, node status, bladeset information, volume information, network configuration, gateway services, and current warnings and errors.
- **`collect_logs`:** Gathers a set of debugging data for a single node, a subset of nodes, or the entire system, if required. The data is automatically combined into a single file (.tar) and compressed (.zip). This single file can then be uploaded to VDURA Technical Support for analysis. If the `collect_logs` command is issued on an RM repset member node, it will automatically generate and include a `sysstat all` output and logs/cores for the last seven days. As it contains powerful filtering capabilities, issuing `collect_logs ?` at the `[pancli]` prompt will list all available options for this command.

Collecting logs through PanAPI and PanCTL. On PanFS 12.0.0, a log collection can also be run through PanAPI, which invokes `collect_logs` and manages the run around it. A run records whether it succeeded and which nodes failed, a second run is refused while one is in progress, and old archives are cleaned up. PanCTL wraps this as `panctl log-collections`, or `panctl lc` for short:

Command	What it does
`panctl lc create`	Starts a collection across the realm
`panctl lc list`	Shows what has run, how it ended, and how large each archive is
`panctl lc get <id>`	Shows one collection in full, including the result for each node
`panctl lc download <id>`	Downloads the archive
`panctl lc delete <id>`	Stops a run that is still going, cleans the nodes, and removes the archive

Archives are often hundreds of megabytes. `panctl lc download` streams the archive to disk, resumes an interrupted transfer where it stopped, and verifies the SHA-256 checksum when the download finishes. An archive holds configuration and state from every node, so handle it as sensitive and keep it inside support channels. Archives stay on the Director that produced them. Old archives are cleaned when a new run starts or when a collection is deleted, not on a timer, and by default the newest 3 runs and 24 hours are kept. See the VDURA PanCTL User Guide and the VDURA PanAPI Reference Guide for the full command and endpoint details.

Any single log file or `sysstat all` output can be attached to your SR, as long as the file is under 5 MB in size. Any file greater than 5 MB in size must be uploaded to our uploads logs server. Available protocols for upload are SCP, FTP, and HTTPS. Our TSEs will provide you all the information needed (server names, login names, and passwords) to access the uploads server. This is a "jailed environment", therefore simple commands will not work if used (for example, `ls` and `cat`). Since `collect_logs` uses the realm name and a timestamp in the resulting logs filename, giving the logs a custom name is usually not necessary.

13.6 Feature Requests

On occasion, a Service Request will turn into a customer's desire for a new product feature. VDURA submits the request to our Product Management team for evaluation and closes the Service Request. VDURA will contact the requestor if the feature will be included in a future release. We would ask that the

requestor provide as much detail as possible to help the evaluation and possible implementation of the new feature. VDURA strives to add small feature requests with each release so that we can be as responsive as possible to the needs of our valued customers.

13.7 Service Request Statuses and Meanings

Service Requests can be in one of a variety of statuses depending on what has been done and what the next step is.

Status	Meaning
3rd Party Action Required	VDURA and/or the customer is waiting on a third party to perform a specific action. (Rare)
Assigned	VDURA has the next action and owes the customer a response.
Closed - Pending Part Return	The issue is resolved and can be closed when VDURA receives the failed part back.
Engineering	VDURA Engineering has the next action and owes Technical Support a response.
Pause	There is nothing to do for VDURA or the customer until an agreed-upon date has arrived.
Pending Bugfix	A Jira issue has been opened but has not been corrected yet.
Pending Customer Action	The customer owes VDURA the next action or response. Should a Service Request remain in this state for more than 5 days without an update or agreed-upon next contact date, it should be moved to "Resolved - Customer Verify".
Pending RMA	VDURA owes the customer an RMA.
Resolved - Customer Verify	VDURA believes that this Service Request has been resolved and is awaiting confirmation from the customer.
Unassigned	The Service Request has no owner. (Usually occurs only when a new Service Request is opened.)

14. Return Material Authorization (RMA)

A Service Request must be opened to engage the VDURA Technical Support team. For a failed part, use **Report Hardware Failure/RMA** (see chapter 8).

14.1 RMA Process

If hardware is identified as failed, VDURA will issue an RMA for the failed part if it is either covered by warranty or is under a valid service program. All shipping costs (both ways) are covered by VDURA for warranty and service program customers. To process an RMA, customers must provide VDURA with the failed part's serial number and confirm the delivery address.

- **Continental Europe:** All customers in continental Europe will be sent replacement parts from Veldhoven, Netherlands. Notwithstanding customs issues, customers located in the European Union generally receive their parts on the next business day, if RMAs are submitted before 10:00 AM US Eastern Time. Countries not part of the EU are shipped "best effort"; parts usually will be delivered in one to three business days, depending on customs delays.
- **United Kingdom:** All customers in the UK will be sent parts from Basildon. RMAs for the UK must be submitted prior to 8:00 AM US Eastern Time to be delivered next business day. Again, customs issues may impact delivery times.
- **United States and the rest of the world:** All other (non-European) customers will receive replacement parts from the United States. Customers in the United States will receive their parts next business day if their RMA is submitted before 4:00 PM US Eastern Time.

All deliveries and returns are usually trackable when shipping information becomes available, after approximately 12 to 24 hours. The portal does not currently track RMAs. To get the status or shipping details of an RMA, ask VDURA Customer Support on the Service Request you raised.

14.2 RMA Return Process

RMAs will be kept open in our CRM system until the failed parts are returned. Failed parts must be returned to VDURA within 30 days for US customers and 60 days for non-US customers. Return of failed parts helps keep our costs low and allows us to identify any specific hardware failure trends. Additionally, we do failure analysis by request.

Customers that fail to return parts may be invoiced for the list price of that part, or VDURA may suspend RMA service for customers that continuously fail to return failed parts in a timely fashion.

14.3 Third-Party Product RMAs

VDURA uses several third-party products, such as switches, in our storage solutions. RMAs for these products are usually stocked by the manufacturers of that product. If an RMA is required for one of these products, and service has been purchased for them, then VDURA will initiate the RMA with the equipment manufacturer, who will drop ship the replacement to the customer.

14.4 Secure Media and Hardware Disposal Options

Customers that cannot return non-volatile hardware components containing user data can upgrade their VDURA service contracts with the following two support subscriptions for secure media/hardware disposal. Both programs are available on a per-node basis.

- **HW-Support-NBD-NR-MEDIA:** This plan is a support subscription option that provides next-business-day support and allows customers to remove NVMe and SATA drives from Director and Storage Nodes after an authorized RMA has been issued. Once the items have been removed according to support procedures, the customer reassembles and returns the node(s) in a manner similar to a regular RMA.
- **HW-Support-NBD-NR-NM:** This plan is a support subscription option that provides next-business-day support and allows customers to destroy Director and Storage Nodes after an authorized RMA has been issued. Note that HW-Support-NBD-NR-NM includes the services described in HW-Support-NBD-NR-MEDIA.

14.5 Statement of Volatility

VDURA realizes that attention to detail is critical for secure environments to be successful and therefore provides a detailed Statement of Volatility for all component hardware that is shipped.

For legacy hardware, ask VDURA Customer Support for the most up-to-date Statement of Volatility document. For V5000 hardware, please contact VDURA for further assistance.

15. VDURA Product Lifecycle and Policies

This chapter covers End of Availability (EOA) Policy.

15.1 End of Availability (EOA) Policy

This section covers Definitions and Policies.

Definitions

The following table defines each term.

Term	Definition
Announcement Date	The date that VDURA announces to its customers and partners that a product is no longer available for purchase. This date is 60 days prior to the End of Availability Date.
End of Availability Date	The last date on which VDURA will accept a purchase order for newly manufactured hardware and newly developed software.
Last Ship Date	The last date on which VDURA will ship hardware and software for which a purchase order has been placed. This is typically for 60 days beyond the End of Availability Date.
End of Continuing Hardware Support Date	The last date that VDURA will provide hardware replacements (RMAs) for hardware sold by VDURA. This is typically for 3 years beyond the Last Ship Date.
End of Continuing Software Support Date	The last date that VDURA will provide software updates for VDURA software sold by VDURA. This is typically for 18 months beyond the Last Ship Date.
End of Technical Support Date	The last date that VDURA will provide phone and web support for hardware and software sold by VDURA. This is typically for three years beyond the Last Ship Date.

Policies

- Hardware repair or replacement will occur for all defective field replaceable units (FRUs) for three years after EoA is declared for a particular product. Eligibility for this support is contingent upon a customer being under a support contract for a continuous three-year period after the EOA date is announced. Products must currently be under warranty or a service agreement.
- VDURA reserves the right to substitute functionally equivalent components should a product not be replaceable or repairable.
- VDURA will test and qualify new maintenance and/or patch releases on hardware for 18 months following EoA declaration for a particular product.
- VDURA will patch the last valid maintenance release for EoA hardware.
- Support for EoA products beyond 18 months following EoA notification is at the discretion of VDURA.
- Only customers covered under warranty or by a current service agreement are eligible for the software subscription program (software upgrades).
- Software releases are in the format of `<major>.<minor>.<maintenance>.<patch>`. VDURA policy is to support the current software release plus two previous versions of software at the `<minor>` level. For example, if the current version is 10.1.0.x, the previous versions supported are 10.0.1.x and 10.0.0.x.
- For a major or minor release, the full feature set of each new release will be supported on the EoA platform to the extent of the technical limitations of the platform.
- VDURA EoA announcements are posted for all customers on the Support Portal, on the **Product Documentation** page (see 10.3).

16. Remote Support

VDURA Technical Support Engineers may remotely and securely connect to your VDURA storage cluster and/or clients, if permitted. Typically, VDURA will use SSH access, WebEx remote support (via HTTPS session), Microsoft Teams, or any other form of remote login capability provided.

17. PanActive Link

PanActive Link® is currently not available. This guide will be updated if that changes.

18. Release Notes and Documentation

You can find VDURA customer documentation, such as guides and release notes, at `www.VDURA.com/resources/documentation`. Copies can also be found on the Support Portal in the **Release Notes** and **Product Documentation** pages (see chapter 10).

19. Training

VDURA Global Services currently offers training and certification for our customers and partners through the “System Administrator Training and Certification” course. This course provides a Systems Administrator or similar IT team member the knowledge to install, configure, and maintain a VDURA storage cluster.

This instructor-led online course delivers a complete introduction to the PanFS parallel file system delivered on VDURA storage appliances. Upon successful completion of this course, the student will earn a certification as a VDURA System Administrator. The course provides the Systems Administrator or IT team member with the knowledge to configure and maintain a VDURA system. Topics covered include reference architecture, the PanFS storage operating system, and the DirectFlow protocol. Each student will gain a firm understanding of the configuration, operation, maintenance, and diagnosis of basic alerts related to the VDURA suite of products.

The redundant and field-replaceable components of the appliances are discussed and reinforced with lab exercises. Object-based file system theory, software upgrades, and configuration scenarios will also be covered. The instructor will focus on the fundamentals of the PanFS storage operating system, the DirectFlow Client access software for Linux, the VDURA storage virtualization model, and the VDURA Management Console GUI and PanCLI interfaces. Students will be introduced to the features available when deploying a VDURA storage system and how to best configure it to obtain optimal redundancy and performance.

20. Custom Ports for DirectFlow Clients for Linux

To request a custom port for the DirectFlow Client for Linux, raise a **Request a DirectFlow port** request (see chapter 7). VDURA Technical Support can provide articles that explain DirectFlow ports and how to request a new one. The DirectFlow Client for Linux itself is on the **DirectFlow clients** tab of Software downloads (see 12.3).

21. Thank You for Choosing VDURA!

Thank you for taking the time to review our VDURA Customer Support Guide. We hope you found the information helpful and insightful. At VDURA, we are committed to providing you with the highest level of service and support to ensure your success.

21.1 Your Satisfaction Is Our Priority

We appreciate your trust and are dedicated to exceeding your expectations. Should you have any questions, need assistance, or require additional resources, please do not hesitate to reach out to our support team. Your feedback is invaluable to us and helps us continually improve our offerings.

21.2 Stay Connected

To stay updated on the latest news, product updates, and best practices, we invite you to:

- **Visit our website:** `www.VDURA.com` for the latest information and resources.
- **Follow us on social media:** Connect with us on LinkedIn, X, and YouTube for updates and community engagement.

21.3 Looking Ahead

We are excited about the future and the opportunities that lie ahead. Together, we can achieve remarkable results and drive innovation.

Once again, thank you for choosing VDURA. We look forward to supporting you every step of the way.

Warm regards,

Your VDURA Team