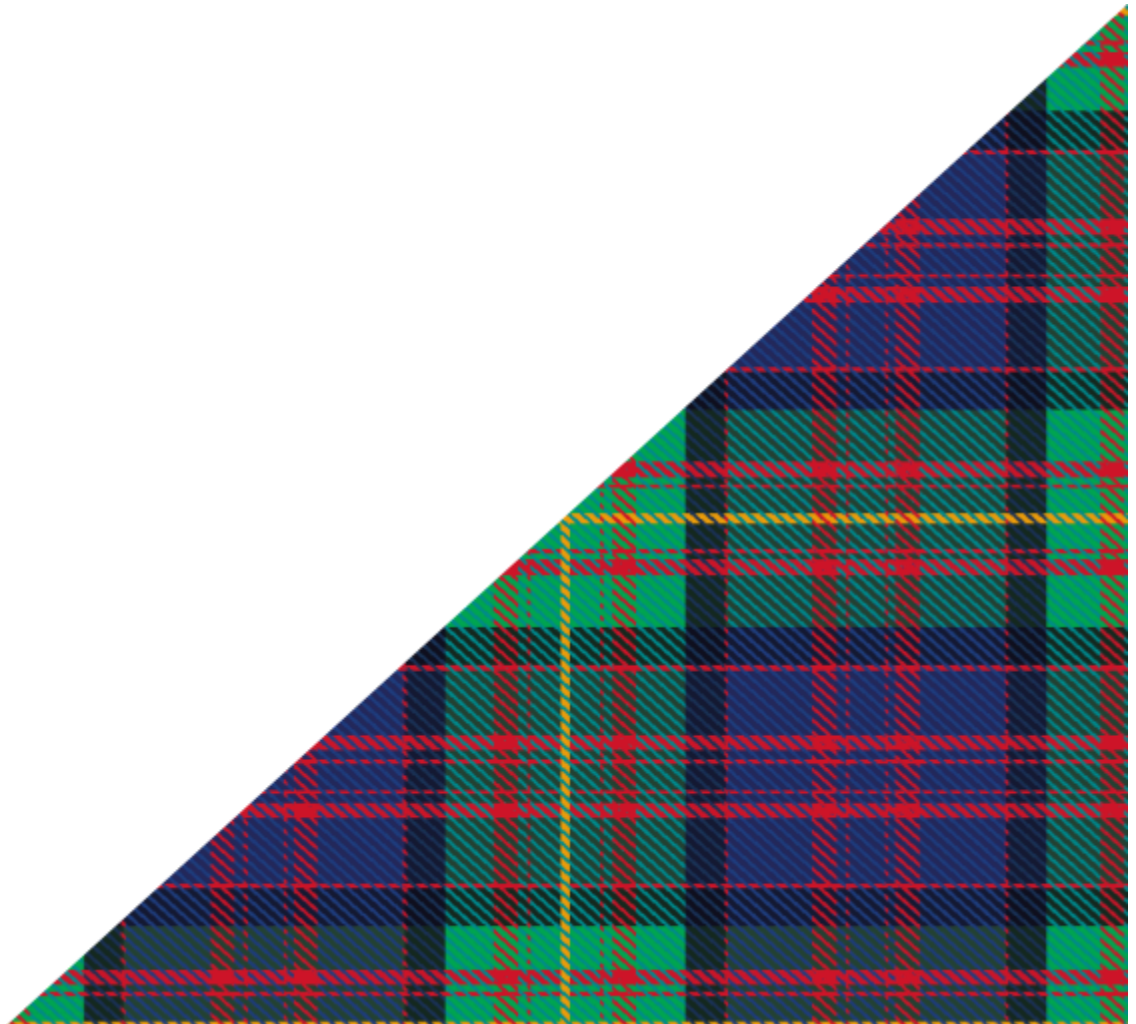


SCS Procurement Application User Guide

Revised: April 2024



Contents

Introduction	- 3 -
Get Help	- 3 -
Get Started	- 4 -
Log In	- 5 -
Procurement Application Home Page	- 6 -
Creating a New Purchase Request: <i>Request Info</i>	- 9 -
Creating a New Purchase Request: <i>Items</i>	- 11 -
Creating a New Purchase Request: <i>Attachments</i>	- 12 -
Creating a New Purchase Request: <i>Payment Info</i>	- 13 -
Creating a New Purchase Request: <i>Business Justification</i>	- 15 -
Messaging	- 18 -
Status History	- 19 -

Introduction

The SCS Computing Facilities Procurement Application is the preferred method for placing orders through our procurement office.

The Purchasing Agents within the SCS Computing Facilities group offer procurement services for technical equipment, both capital (over \$5,000) and non-capital (under \$5,000).

All purchases of technical equipment, both capital and non-capital, should be arranged through SCS Computing Facilities. For nontechnical purchases such as consulting, furniture, hotel, car rental etc. please contact your department business manager for guidance.

Get Help

If you need help while using the Purchasing Application, have process questions, or have browser or general computing issues, please contact the SCS Help Desk via 412-268-4231, email help@cs.cmu.edu or submit a support request online via <https://computing.cs.cmu.edu/forms/submit-ticket.html>.

If you experience issues with the functionality of the Purchasing Application, you can also submit bug reports or enhancement requests using the “Feedback” button in the top right corner of the application.

More information about the purchasing process, related CMU policies and general business practices can be found on the SCS Computing Facilities website via <https://computing.cs.cmu.edu/business/purchasing.html>.

Get Started

SCS Computing Facilities provides technical consulting for the SCS community. This can be a valuable asset when there are questions or concerns about the use-case, compatibility or appropriate configuration for research or desktop computing purchases.

Do you already know what you need to purchase?

- Before initiating a purchase request through this system, you will need to gather some supporting documentation:
- The product/part you wish to purchase, the name of the vendor, if already chosen, and any quote you may have received for the item.
- The quantity of the product/part that is being purchased.
- The timeframe in which you need the item to be received.
- An Oracle string(s) for the purchase.
- If your equipment purchase exceeds \$5,000 and you are buying from a non-preferred vendor, you must obtain competitive bids and complete pages one and two of the [Purchasing Checklist and Bid Summary form](#) (requires Adobe Acrobat).

Please Note: Capital equipment purchases cannot be made on GM Oracle strings that are within 90 days of their final close.

Do you need help deciding what to purchase?

If you are unsure of what you want to purchase or from which vendor, the SCS Computing Facilities group is happy to assist you in identifying technical solutions to meet your needs.

We provide procurement services for computing equipment and other technology-related items for the SCS community. We also provide consulting and planning for the purchase of equipment and peripherals, especially for multi-machine research environments, to meet the need presented by each unique situation or requirement. To initiate this process, please submit a [Configuration Assistance Request](#) via <https://computing.cs.cmu.edu/desktop/forms/desktop-inquiry.html>.

Please Note: All purchases must adhere to SCS and CMU procurement policies.

SCS policies and procedures are maintained in the technical purchasing section of the SCS Computing Facilities website via <https://computing.cs.cmu.edu/business/purchasing.html>. Included on this page are links to [recommended computers and configurations](#).

For your reference, here are links to CMU policies that impact our SCS purchasing practices:

- [Purchasing Policy](#)
(<https://www.cmu.edu/policies/financial-management/purchasing-policy.html>)
- [Conflict of Interest Policy](#)
(<https://www.cmu.edu/policies/administrative-and-governance/conflict-of-interest-commitment.html>)


Log In

This application is entirely web-based and can be accessed through your favorite web browser at <https://rams.srv.cs.cmu.edu/purchase>.

You will be asked to authenticate with your Andrew credentials :

Carnegie Mellon University

Web Login

AndrewID 

Password

Warning: The URL for this page should begin with <https://login.cmu.edu>.
If it does not, do not fill in any information, and report this site to it-help@cmu.edu.

[About](#) | [Change Password](#) | [Forgot Password?](#)

If you have already authenticated through this service in your current browser session, you will be forwarded directly to the application. Otherwise, you will be prompted for your AndrewID and Andrew password.

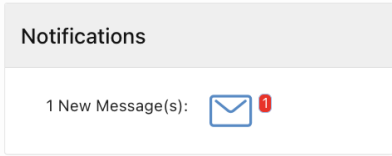

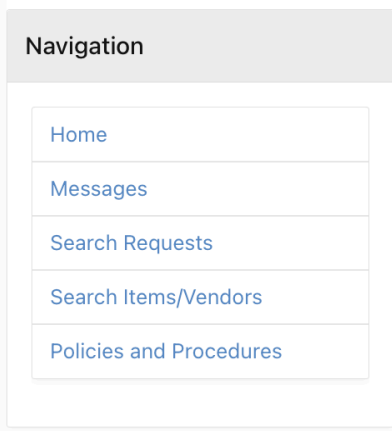
Procurement Application Home Page

Upon successful authentication, you will be presented with the homepage of the application:

The screenshot shows the homepage of the Procurement Application. At the top, there is a blue header with the Carnegie Mellon School of Computer Science logo on the left and navigation links (t-annkearn@andrew.cmu.edu, User Guide, Feedback, Release Notes, Logout) on the right. Below the header, the main content area is titled "Welcome to the SCS Computing Facilities Procurement Application". On the left side, there is a sidebar with three main sections: "Notifications" (showing 1 New Message(s) with an envelope icon and a red notification bubble), "Navigation" (with links for Home, Messages, Search Requests, Search Items/Vendors, and Policies and Procedures), and "Requests by Status" (with counts for Request Started (1), Submitted (1), and In Process (1)). The central part of the page features a large 3D rendering of a white, rounded figure pushing a silver shopping cart.

The navigation sidebar on the left side of your screen contains the main options available through the application. This sidebar is visible and available throughout the processing of any order.

Please Note: As a best practice, **save your order/form progress before clicking any sidebar option.** While the form does automatically save your progress, manually saving your draft will ensure the latest changes are captured before navigating away from your current order.

Sidebar Component	Functionality Description
<p>Notifications</p> 	<p>The “New Messages” icon indicates that there are pending messages that have not yet been read. This section will only appear if you have unread messages.</p>
<p>New Request</p> 	<p>The ‘New Request’ button is how you create a new order.</p>
<p>Navigation</p> 	<p>There are multiple options in this region:</p> <p>Home: Click to return to the home page from wherever you are in the application.</p> <p>Messages: Click this option to view the list of messages related to all of your purchase requests. You can sort your messages by clicking on the column headers. You can also reach your message queue by clicking on the new messages icon if it is showing.</p> <p>Search Requests: This option will take you to a list of requests that you have created. Search request statuses will be covered in more detail later.</p> <p>Search items/Vendors: Click this option to search by various items. The search mechanism will be covered in more detail later.</p> <p>Policies and Procedures: This option will take you to procedural information within the application.</p>
<p>Requests by Status</p>	<p>This is a summary of all your requests by their current status. These statuses may include:</p>

Requests by Status	<p> Draft In Process Re-Opened Submitted Pending Approval Approved Order(s) Placed Part Received Received Completed Cancelled </p> <p> Not all these statuses will show. You will only see a status if you have a current order within that status. </p>
<p> Draft (1) </p>	
<p> Submitted (3) </p>	
<p> In Process (1) </p>	

Creating a New Purchase Request

Click on the 'New Request' button or click on the image with the shopping cart on the home page. This will take you to the main purchase request page. The main request page consists of seven tabs:

- **Request Info**
- **Items**
- **Attachments**
- **Payment Info**
- **Business Justification**
- **Messages**
- **Status History**

Note: A 'Summary' tab will also display on requests that have been submitted.

Creating a New Purchase Request: Request Info

Submit Request
Save Draft
Cancel Draft

Request Info
Items
Attachments
Payment Info
Business Justification
Messages
Status History

* Items with a red asterisk are required .

Request - 12843

Request Status: **Request Started** ?

Shipping Method: None Specified ?

* Date Needed: 22-APR-2024 ?

Requester - t-annkearn t-annkearn (t-annkearn)

Requester: **t-annkearn t-annkearn (t-annkearn)** ?

Phone: ?

Office: ?

Department: **Vice Provost for Computing Services (Comp Services)** ?

* Email: **t-annkearn@andrew.cmu.edu** ?

Request Details

* Description: ?

Additional Instructions: ?

* This purchase is for: Me Someone Else (End User) ?

* Is there an Associated SCS Asset? Yes No ?

* Is this for a cluster? Yes No ?

Continue your order by selecting a tab at the top, or click Next to add Items.

Next

Your name, university phone number, office location, department and email address are pre-filled from data in the Workday system. Any changes made in Workday will be reflected here within 24 hours.

Mandatory fields are marked with a red asterisk (*).

Shipping Method: Though not mandatory, you may choose your shipping method.

Date Needed: This field should be set to the day you wish to have your item(s) delivered to the University. For rush shipments, select the first possible date and add a note in the 'Additional Instructions' section. If you do not have a date needed, leave the default date selected (3 weeks from the order start date).

Please Note: *We cannot guarantee delivery will occur by this date as this is determined by the vendor.*

Description: Enter a meaningful description to help easily identify your purchases. This information will be included on communications regarding this order. Example: "MacBook for Joe Professor " rather than a generic description of "MacBook."

Additional Instructions: This is not a required field. Please include anything you need our purchasing agent to know in context with your order. Example: "this order is actually for Joe Professor in California", or "please ship overnight if possible".

This purchase is for: The default is "Me". To show your request is for someone else, select the "Someone Else" button. An "End User Lookup" box will appear. Enter the end user's SCS or Andrew user ID, click on the end user's name when it appears in the list, then click the "Verify" button. For this order, the provided end user will have "view only" privileges. Once you choose an end user and the email address is verified, you also have the option for this person to receive notifications concerning messages exchanged or status changes that happen between you and our purchasing agent. Some faculty and administrators will love this, others will not. You have the power to choose. If the end user does not appear in the drop down list, (this is rare but it does happen) please be sure to specify who the purchase is for in the additional instructions box.

Is there an Associated SCS Asset: The last piece of data in the request info region is for associated assets. This is populated when you are buying something that is to be a part of an existing asset. For example, if you wish to buy additional memory for a server that is already in service, choose the "Yes" option for "Associated SCS Asset" then enter either the asset number or the host name of the PC/server in the text box. Once the asset is found, click on it.

Any time during this process, *you have the ability to save the work that you've already completed by clicking the 'Save Draft' button at the top left corner of the request.* You can then come back and finish your request at a later time by clicking the draft link under "Requests by Status" on the left side of the screen.

Creating a New Purchase Request: Items

The screenshot displays the 'Items' tab of a purchase request form. At the top, there are buttons for 'Submit Request' and 'Save Draft'. Below these are navigation tabs: 'Request Info', 'Items' (selected), 'Attachments', 'Payment Info', 'Business Justification', 'Messages', and 'Status History'. A message states: 'You have not yet added any items to this request. Click the "Add Item" button to add an item.' A note reads: 'Note: You must add items to your P...'. There is an 'Add Item to Request' button and a 'Next' button. The 'Item Detail' pop-up window contains the following fields:

- * Item Qty ? Unit ?
- * Item/Service Description ?
- Part/Model # ?
- Item URL ?
- Suggested Vendor ?
- Unit Cost \$?

Buttons for 'Add Item' and 'Cancel' are located at the bottom of the pop-up window.

To add new items to your request, select the “Add Item to Request” button. This will open a pop-up window.

Item Quantity: The numeric value for the quantity you need.

Unit: This field is optional. It can be any type of measurement that your item is sold in and is most useful if the unit does not come in a single quantity. Example: 1 case of widgets or 1 pallet of hard drives.

Item/Service Description: A description of what you intend to purchase.


Part/Model number: The part or model number., if available.

Item URL: The URL or web link to the item, if available.

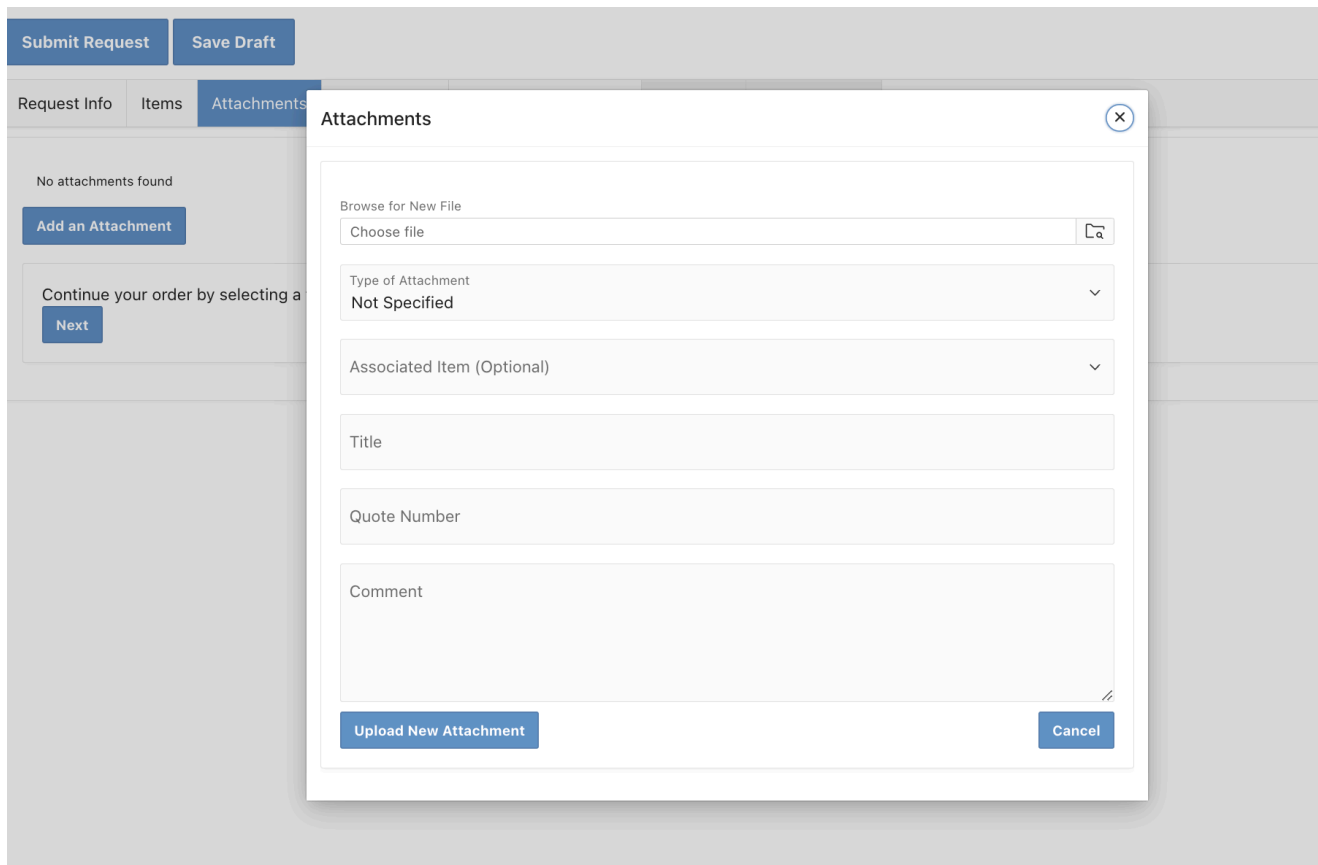
Suggested Vendor: The suggested vendor you wish to buy the item from. The requested vendor may not be able to provide the service or item(s) requested. We may be able to find better pricing because of established relationships and/or agreements in place with university preferred vendors. If your vendor is a “sole source” vendor, please let us know this in the “Additional Instructions” box in the Request Info tab.

Unit Cost: Cost per unit.

Please Note: The unit cost becomes very important if you wish to define your payment distribution by dollar amount as opposed to percentage.

Important: After each item entry click the “Add Item” button. The item you just added to the order will appear in the Items tab. To add more items to the order, repeat the above steps. Each line with individual items can be revised or updated using the edit button located to the left of each line ( pencil icon). Keep in mind that entering specific item/part numbers as well as detailed descriptions will make searching easier for you later.

Creating a New Purchase Request: Attachments



The screenshot shows a web application interface with a modal window titled "Attachments". The background interface includes a top navigation bar with "Submit Request" and "Save Draft" buttons, and a tabbed menu with "Request Info", "Items", and "Attachments". The "Attachments" tab is active, displaying "No attachments found" and an "Add an Attachment" button. Below this is a prompt to "Continue your order by selecting a" with a "Next" button. The modal window contains the following fields:

- Browse for New File:** A text input field labeled "Choose file" with a file selection icon.
- Type of Attachment:** A dropdown menu currently set to "Not Specified".
- Associated Item (Optional):** A dropdown menu.
- Title:** A text input field.
- Quote Number:** A text input field.
- Comment:** A large text area for entering details.

At the bottom of the modal, there are two buttons: "Upload New Attachment" and "Cancel".

Click the “Add an Attachment” button. This will launch a pop-up window. Select the document you wish to upload, classify it with the “Type of Attachment” field. Select the associated item, provide a title, enter a quote number if one exists, add any additional comments about the document, and click the “Upload New Attachment” button.

Creating a New Purchase Request: [Payment Info](#)

The screenshot shows the Oracle Procurement Application interface. At the top, there are buttons for "Submit Request" and "Save Draft". Below these are tabs for "Request Info", "Items", "Attachments", "Payment Info", "Business Justification", "Messages", and "Status History". The "Payment Info" tab is selected. The main content area displays a message: "You have not yet added any Oracle strings to this request." Below this is a note: "Note: You must add a string to your order." A button labeled "Add an Oracle String to this Order" is visible. Below the note, there is a section for "Continue your order by selecting a" with a "Next" button. A pop-up window titled "Oracle String" is open in the center. It contains the following fields and options:

- A text input field for the Oracle String, with a prompt: "Start typing an Oracle string to see a list of matching options, or copy and paste your desired string into the field. Either dot or dash separators should work."
- A required field for "Oracle String" with a text input box.
- A required field for "Distribute By" with two radio button options: "Percentage" (selected) and "Dollar Amount".
- A required field for "Percentage" with a text input box containing the value "100".
- A "Notes" field with a text input box.
- Two buttons at the bottom: "Add String" and "Cancel".

Click the “Add an Oracle String to this Order” button. This will launch a pop-up window.

Oracle String: Begin typing your oracle string, using dashes instead of dots between segments. Select the correct string from the list. If your Oracle string does not appear in the list, you will not be able to use that string to pay for your order. Please note: If you paste or type an entire string using dots as the separators, and the string is valid, the system will recognize and convert it properly.

Percentage: Choose how you want to distribute the payment for your purchase request. You have the option of using percentages or dollar amounts. Select your oracle string. If using just one string, specify 100%.

If you need to use multiple strings, be sure that the total percentage of the distribution adds up to 100%. If not, you will receive an error upon submission.

Dollar Amount: If you choose to build a distribution using dollar amounts, please be sure the total dollar amount is equal to the sum of all the items in the request or you will receive an error. You may also put in “Notes”. This may be helpful information if you are using multiple strings.

Please note: If you do not find your oracle string in the system, you may need to reach out to your manager or faculty member to obtain a valid oracle string.

After each entry, click the ‘Add String’ button.

Search tip: You can search by GM or GL. When searching for a GL string, narrow your search by entering your org number. This will generate a list of GL strings used in your department.

Creating a New Purchase Request: Business Justification

Submit Request
Save Draft

Request Info

Items

Attachments

Payment Info

Business Justification

Messages

Status History

Who is Involved? * ?

What department is this purchase for? * ?

What does the charge represent? * ?

30 of 1024

Why or how does the charge relate to university business? * ?

54 of 1024

Where will the item(s) be used? * ?

Bldg *

Room *

When will the item(s) be used? * ?

* Is a checklist required for this order? Yes No ?

* Does this order contain hazardous or biological materials? Yes No ?

Once you have completed filling out your order, you may Submit it.

The questions asked here support University audit efforts. **These are mandatory fields.** The more specific you are, the less likely you will be asked for clarification at a later date should your purchase be chosen for an audit. These are free form fields.

Who is involved? Clarifies who will be using the purchase item(s).

What department is this purchase for? This may or may not be the department of the purchaser. This field helps the Purchasing agent to know what department to contact regarding purchasing approval or the Oracle string.

What does the charge represent? Clarifies what the purchase represents.

Good examples:

- “Purchase of new hardware to replace/upgrade older domain controllers”
- “Renewal/upgrade fee for our Visual Studio Premium w/MSDN license”
- “The purchase of 5 seats of wireworks for use by all electrical engineers in HCII”

Bad examples:

- “???”
- “Work”
- “Software”

Why or how does the charge relate to university business?

It would be helpful to name the specific project for which the purchase is being made.

Good examples:

- “Visual Studio is an integrated software development environment that is critical to our work.”
- “Joe Faculty will be using the tablet for his research work on the NSF REAL project.”
- Software supports the expansion of the Surtrac adaptive traffic signal network developed at CMU”

Bad examples:

- “Because I said so”
- “Computer upgrade”
- “Part of CSD”

Where will the item(s) be used?

If it is a campus location, please enter the building and room. If the items will be used off-campus, please specify an alternative location.

When will the item(s) be used?

Frequency of use. Options are daily, during the semester, or other. If you select other, you will be prompted for an explanation.

Is a checklist required for this order?

If the Purchasing Checklist and Bid Summary Form are required, select yes and click on the information icon (?). This will open a pop-up window which will contain the link to the form. The form can also be found on the Computing Facilities website at: <https://computing.cs.cmu.edu/business/purchasing>.

Please be sure to attach the completed form in the “Attachments” tab once you fill it out. **Once your request form is complete, you may submit the request or save to draft until you are ready to submit.**

Does this order contain hazardous or biological materials?

Generally, this is no. **We are not permitted to purchase hazardous or biological materials.** Should this order include such materials, the order cannot proceed and you will be directed to <https://www.cmu.edu/ehs/hazmat-pcard/index.html>.

Once you have completed filling out your order, click the “Submit Request” button. Once you submit the request, you can view it. However, to modify the request or to send a message to the purchasing agent, you must use the messaging feature found in the “Messages” tab:

The screenshot shows a user interface for a procurement application. At the top left, there is a blue button labeled "Clone Request". Below this is a horizontal navigation bar with several tabs: "Summary", "Request Info", "Items", "Attachments", "Payment Info", "Business Justification", "Messages" (which is currently selected and highlighted in blue), and "Status History". Below the navigation bar, the main content area displays the text "No messages have been sent regarding this Purchase Request." At the bottom of this area, there is a blue button labeled "New Message".

Please Note: If changes are needed, use the messaging feature to send a message to the purchasing agent to re-open your request. Once changes are applied, you can resubmit your request.

While you are becoming comfortable with this application, ***we suggest saving the order first as a draft*** so that you can take time to review it and make any necessary changes prior to submitting it for processing.



Messages

When needing to correspond with one of our agents regarding a purchase, please use the messaging option in the Messages tab on any order.

You will receive an email once we have responded. A link will be provided in the body of that message that will take you directly to the purchase request itself. You will also see the “New Messages” icon within the application.

Unread messages will have a status of ‘Unread’:

To read your message, simply click the ‘Messages’ under ‘Navigation’ on the left side of your home page.

Notifications		Messages						
1 New Message(s): 								
New Request								
View	Request ID	Request Description	Message Date ↓	Status	Sender	Recipient	Purchasing Agent	Message
	12839	Test Description	29-MAR-2024	Unread	Purchasing Agent <purchase@cs.cmu.edu>	t-annkearn t-annkearn <t-annkearn@andrew.cmu.edu>	blk	Hi Annie, I need to talk to you about charging for this Order

This window will contain the following information:

- **Request ID**
- **Request Description**
- **Message Date**
- **Status**

- **Sender**
- **Recipient**
- **Purchasing Agent**
- **Message**

When you click on the request ID, this will open the purchase request. You can then read your message in the “Messages” tab. This will open a window for you to fully view the message. This window has buttons that give you the ability to close the window, reply, or mark as unread.

You will also receive periodic automated messages when your request undergoes certain status changes. Examples:

- **Order Placed**
- **Reopened**
- **Completed**
- **Sent for Approval**
- **Received**

An automated message will additionally be sent out when an item has been marked as Picked Up.

Status History

The history of your request is recorded at various times during its progress. When the status of the request is modified, we record the date/time of the change:

Summary	Request Info	Items	Attachments	Payment Info	Business Justification	Messages	Status History															
							<table border="1"> <thead> <tr> <th>Status Date</th> <th>Updated By</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>29-MAR-2024</td> <td>blk</td> <td>In Process</td> </tr> <tr> <td>29-MAR-2024</td> <td>t-annkearn</td> <td>Submitted</td> </tr> <tr> <td>29-MAR-2024</td> <td>t-annkearn</td> <td>Draft</td> </tr> <tr> <td>29-MAR-2024</td> <td>t-annkearn</td> <td>Request Started</td> </tr> </tbody> </table>	Status Date	Updated By	Status	29-MAR-2024	blk	In Process	29-MAR-2024	t-annkearn	Submitted	29-MAR-2024	t-annkearn	Draft	29-MAR-2024	t-annkearn	Request Started
Status Date	Updated By	Status																				
29-MAR-2024	blk	In Process																				
29-MAR-2024	t-annkearn	Submitted																				
29-MAR-2024	t-annkearn	Draft																				
29-MAR-2024	t-annkearn	Request Started																				

Status changes have been captured and reported in the “Status History” tab of the request page. These events are listed in descending chronological order.

Cloning a Request

Once a request has been submitted, you have the ability to clone it. You can find the “Clone Request” button in the top left corner of the request page.

This is commonly used when an end user is making the exact same purchase as in the past. For example, if you typically purchase five toner cartridges for your personal printer every two months, you can simply open and clone your previous purchase request and submit it without having to change anything other than the Date Needed field. Everything else is carried over from the request that you cloned. You may update/edit the charge string by clicking the pencil by the payment info.

Your cloned request then becomes a Draft. You can continue the process at this time or save the draft. It will be in the requests box to your left. To retrieve it, click on the draft and set the date needed. You can now submit. That’s all!

Search

The purchasing application comes with a robust search mechanism that can be accessed from the Navigation section of the application. Once you choose “Search Requests” you will be presented with a table of data:

The screenshot shows a search interface with a search bar at the top containing a magnifying glass icon and a 'Go' button. Below the search bar are two filter criteria: 'Status contains 'In Process'' and 'Username = 't-annkearn'', each with a dropdown arrow and a close button. A 'New Request' button is visible in the left sidebar. The main area displays a table of request data with the following columns: ID, Request Date, Requester Name, Description, End User, Status, Status Date, Unread Msg, Line Items, Total Items, Location, Received Date, Last Item Picked Up Date, Order Date, and Submit Date. The table contains one row of data for request ID 12839, dated 29-MAR-2024, requested by t-annkearn t-annkearn, with a description of 'Test Description', status of 'In Process', and a status date of 29-MAR-2024. A warning icon with the number 1 is shown in the 'Unread Msg' column. The table is paginated to show 1 of 1 items.

ID	Request Date	Requester Name	Description	End User	Status	Status Date	Unread Msg	Line Items	Total Items	Location	Received Date	Last Item Picked Up Date	Order Date	Submit Date
12839	29-MAR-2024	t-annkearn t-annkearn	Test Description	-	In Process	29-MAR-2024	1	1	2	Machine Room	-	-	-	29-MAR-24

To search the table of data, click on the magnifying glass. This presents a list of all the visible columns on the screen. Pick the column you want to search and then enter a search value in the text box to the

right. After entering your search criteria, press the “Go” button. This will filter out any records that do not contain the criteria you have entered.

The “Actions” button at the top of the table gives you additional options to control how the data is displayed on the screen, to filter the data and to create reports.

You can also search the table by clicking on any of the column headers. When you click in the column header, you will be presented with a dialogue box containing the following elements:

Requester Name	Description	End User	Status	Status Date	
t-annkearn t-annkearn	↑ ↓	⌵	☰	Submitted	29-MAR-2024
t-annkearn t-annkearn	🔍 Filter...			Submitted	29-MAR-2024
t-annkearn t-annkearn	Test Description			Draft	29-MAR-2024
t-annkearn t-annkearn	Test Description			In Process	29-MAR-2024
t-annkearn t-annkearn	Test Description	Annie Kearney		Submitted	29-MAR-2024

The arrows in the left corner of this box give you the ability to sort by that column in ascending or descending order.

The next icon (⌵) gives you the ability to hide the column all together.

The last icon (☰) lets you insert a “control break”. Selecting this filter will group together the unique values in that column.

Below the icon controls, you are presented with a list of unique values for the column you chose. Selecting one of those values, filters the list and only displays requests with the value you have chosen.

More information about the purchasing process, related CMU policies and general business practices can be found on the SCS Computing Facilities website via <https://computing.cs.cmu.edu/business/purchasing.html>.