



ASPIRE2A+ JOB PORTAL

USER GUIDE v1.1 – 25 February 2026

ACCESS WEB OVERVIEW

About Access Web

- Access Web provides a simple, powerful and consistent interface for submitting and monitoring jobs on ASPIRE2A+.
- It provides an ability to view output of running jobs as well as for jobs which have been successfully completed.
- It facilitate file management on ASPIRE2A+.
- It allows users to upload input files and to download result files to view, animate, etc., on their local system.
- **ASPIRE2A+ system has one Access Web portal, which is:**
 - **Job Portal: To run and manage compute intensive solver jobs on ASPIRE2A+**

Supported Browsers

- **Windows**

- Firefox latest **ESR** (Only Extended Support Release is supported. Please refer to <https://www.mozilla.org/en-US/firefox/organizations/>)
- Google Chrome latest
- Microsoft Edge

- **OSX**

- Firefox latest **ESR** (Only Extended Support Release is supported. Please refer to <https://www.mozilla.org/en-US/firefox/organizations/>)
- Google Chrome latest
- Safari Latest
- Microsoft Edge

Log into Access Web – Job Portal

To login to the **Access Web – Job Portal** from the supported browsers:

- **Go to URL** based on the network you are using from below:
 - a) <https://jobportalaplus.nscs.sg> (from NSCC VPN network)
 - b) <https://astarjobportalaplus.nscs.sg> (from A*STAR network)
 - c) <https://nusjobportalaplus.nscs.sg> (from NUS network)
 - d) <https://ntujobportalaplus.nscs.sg> (from NTU network)
 - e) <https://sutdjobportalaplus.nscs.sg> (from SUTD network)
 - f) <https://neajobportalaplus.nscs.sg> (from NEA network)

Enter **username** and **password** and click 'Log In'.



Note: Use the same credential that you use on **login nodes** of ASPIRE2A+

Username
altairsup

Password
.....

Sign In

Welcome to ASPIRE 2A+ Job Portal

JOB SUBMISSION ON ASPIRE2A+ JOB PORTAL

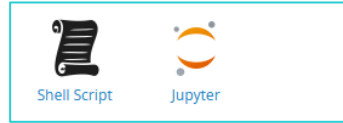
Submit Jobs

- Here are the options for submitting jobs to the **Workload Manager (PBS)** using the **Job Portal** and running them on **ASPIRE2A+**.
 1. **Using a Job Submission Form** : Populate a job submission form containing all the arguments necessary to submit a job for a solver.
 2. **Using a Profile** : Create a **Profile**, a customized shortcut for submitting jobs. The profile can be used later to quickly submit a job.

Submit Jobs

Using a Job Submission Form

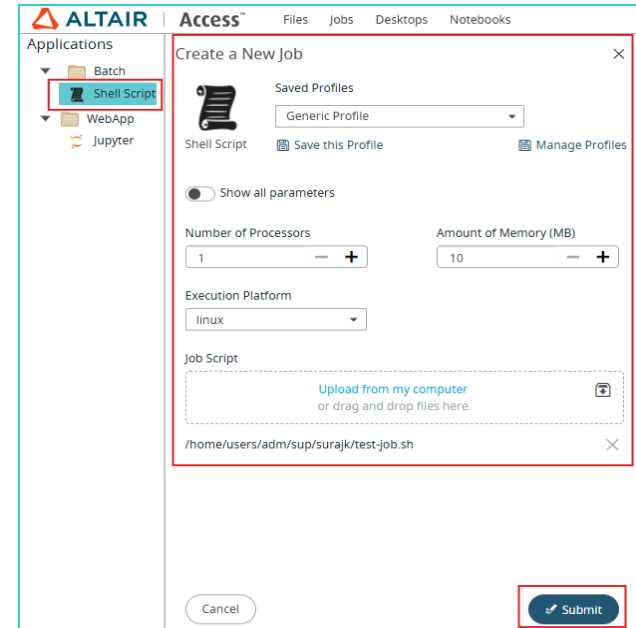
1. Click the 'Jobs' tab on Job Portal. A list of applications are displayed at the top of the Job Monitoring page.



2. Click on an application and the job submission form will be displayed.
3. Fill the required application arguments
4. Input files can be uploaded from the local system or, if already present on the ASPIRE2A+ system, navigate to the file's location in the file explorer on the right side of the form and simply drag and drop it into the field.
5. Click on 'Submit Job'. The job will be submitted, and a notification will be displayed, providing the status of the job.



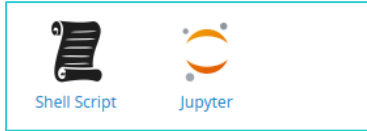
Note: Only required arguments are displayed in default view. To see optional arguments, you can toggle “Show All” button to expand the form.

A screenshot of the Altair Access web interface. The top navigation bar includes 'Files', 'Jobs', 'Desktops', and 'Notebooks'. The 'Jobs' tab is active. On the left, under 'Applications', a tree view shows 'Batch' (expanded), 'WebApp', and 'Jupyter'. 'Shell Script' is highlighted. The main area is titled 'Create a New Job'. It features a 'Saved Profiles' dropdown set to 'Generic Profile', a 'Show all parameters' toggle, and input fields for 'Number of Processors' (set to 1) and 'Amount of Memory (MB)' (set to 10). The 'Execution Platform' is set to 'linux'. A 'Job Script' section has a dashed box for uploading files, with a link 'Upload from my computer or drag and drop files here.' and a file path '/home/users/adm/sup/surajk/test-job.sh' shown below. At the bottom, there are 'Cancel' and 'Submit' buttons, with the 'Submit' button highlighted by a red box.

Submit Jobs

Using a Profile

1. Use a profile that has job arguments pre-populated to submit a job.
2. Click the Jobs tab, a list of applications are displayed at the top of the Job Monitoring page.



3. Click on an application and the job submission form will be displayed.



Note: Only recently used applications are shown. Click on “More Apps” to see full list of applications.

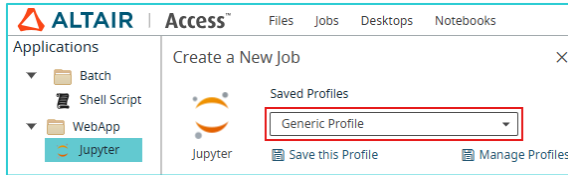
A screenshot of the Altair Access web application. The top navigation bar includes the Altair logo, the word 'Access', and tabs for 'Files', 'Jobs', 'Desktops', and 'Notebooks'. On the left, under 'Applications', a tree view shows 'Batch', 'Shell Script', and 'WebApp', with 'Jupyter' highlighted under 'WebApp'. The main area is titled 'Create a New Job'. It features a 'Saved Profiles' dropdown set to 'Generic Profile' with a 'Save this Profile' button and a 'Manage Profiles' link. Below this is a 'Show all parameters' toggle. The 'Container Image' is set to 'docker.io/tensorflow/t...' and the 'Number of Nodes' is '1'. The 'Queue' is set to 'normal'. The 'GPUS' is set to '1' and 'CPU Cores' is '14'. 'Memory (GB)' is set to '25'. The 'Is GPU Required?' checkbox is checked. 'Walltime' is set to '01:00:00'. There is a 'Project' input field. At the bottom, there are 'Cancel' and 'Submit' buttons, with the 'Submit' button highlighted by a red box.

Submit Jobs

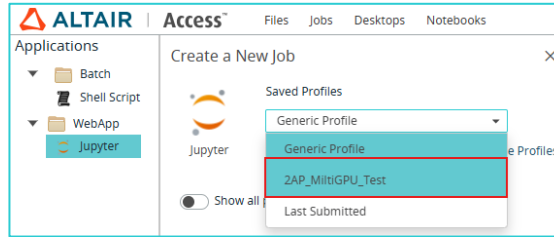
Using a Profile (cont.)

4. Click the drop-down button next to **Generic Profile** to view the list of saved Profiles.

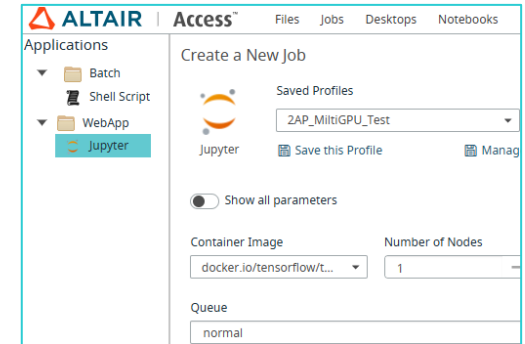
By default, only **Generic Profile** and **Last Submitted** profile will be listed if there are no saved profiles.



5. Select the profile to use from the drop-down list.



6. The job submission form for the selected profile, with pre-populated arguments, is displayed.

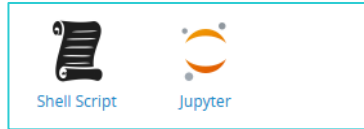


7. Fill in the required application or profile argument and then click 'Submit Job'

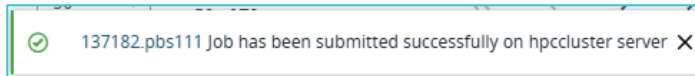
Launching and accessing WebApps

Jupyter Notebook

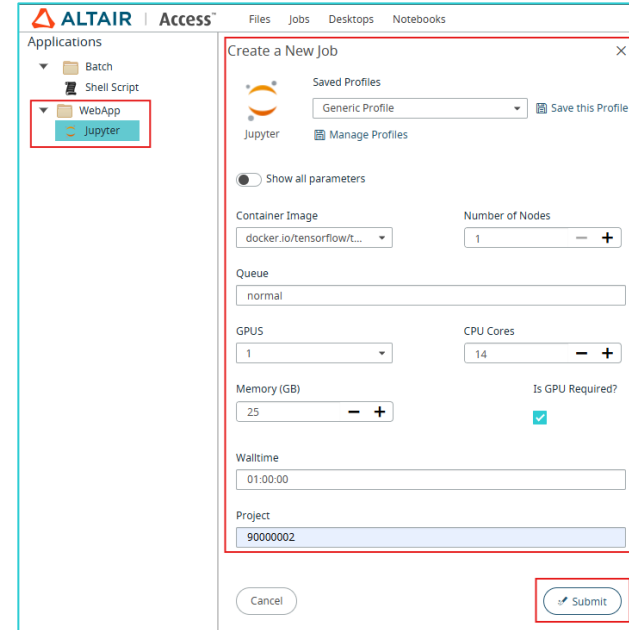
1. Click the 'Jobs' tab on Job Portal. A list of applications are displayed at the top of the Job Monitoring page.



2. Click on an application and the job submission form will be displayed.
3. Fill the required application arguments:
4. Click on 'Submit Job'. The job will be submitted, and a notification will be displayed in the bottom right corner.



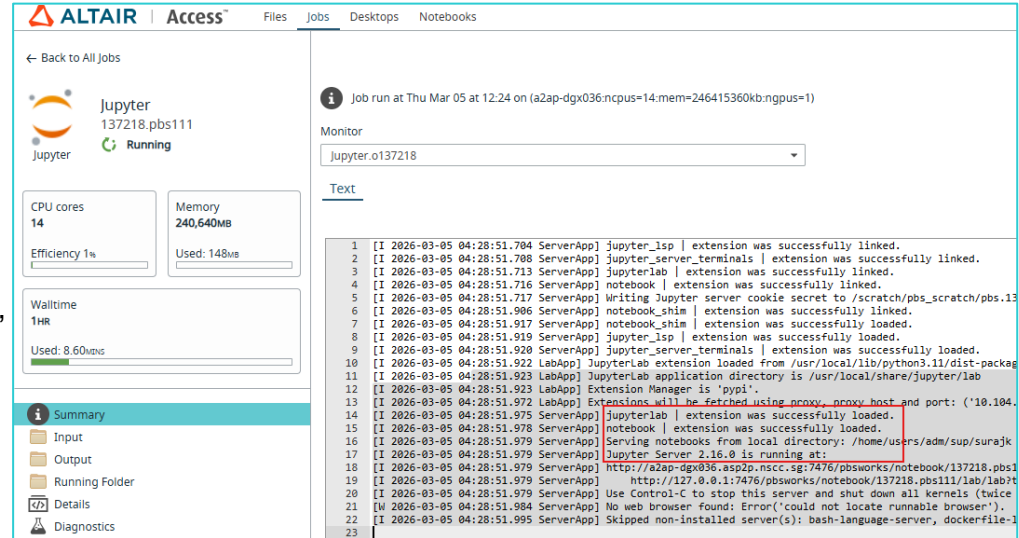
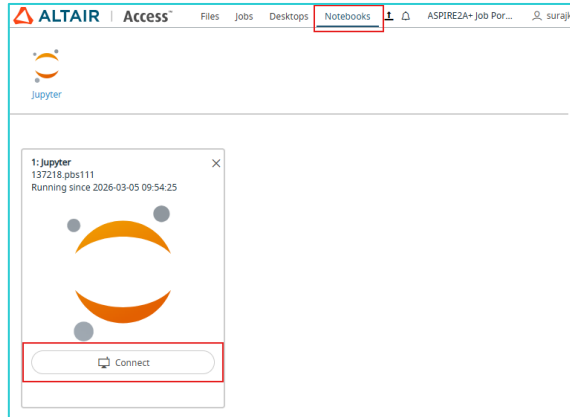
You may go back to the 'Jobs' tab to view the status of job.

A screenshot of the Altair Access web interface. The 'Create a New Job' dialog is open, showing configuration options for a Jupyter application. The 'Applications' sidebar on the left has 'WebApp' and 'Jupyter' selected. The form includes fields for 'Saved Profiles' (set to 'Generic Profile'), 'Container Image' (set to 'docker.io/tensorflow/t...'), 'Number of Nodes' (set to 1), 'Queue' (set to 'normal'), 'GPUS' (set to 1), 'CPU Cores' (set to 14), 'Memory (GB)' (set to 25), 'Waittime' (set to 01:00:00), and 'Project' (set to 90000002). There is a checkbox for 'Is GPU Required?' which is checked. At the bottom right, there is a 'Submit' button.

Launching and accessing WebApps

Jupyter Notebook

- Once the WebApp is successfully launched, “Jupyter Server 2.16.0 is running...” will be displayed in job output.
- Once the job starts running, it will take 10 to 12 minutes to load the WebApp.
- Click the ‘Notebooks’ tab in the Job Portal to view your running Jupyter notebooks. Click on ‘Connect’ to connect to your respective notebook.

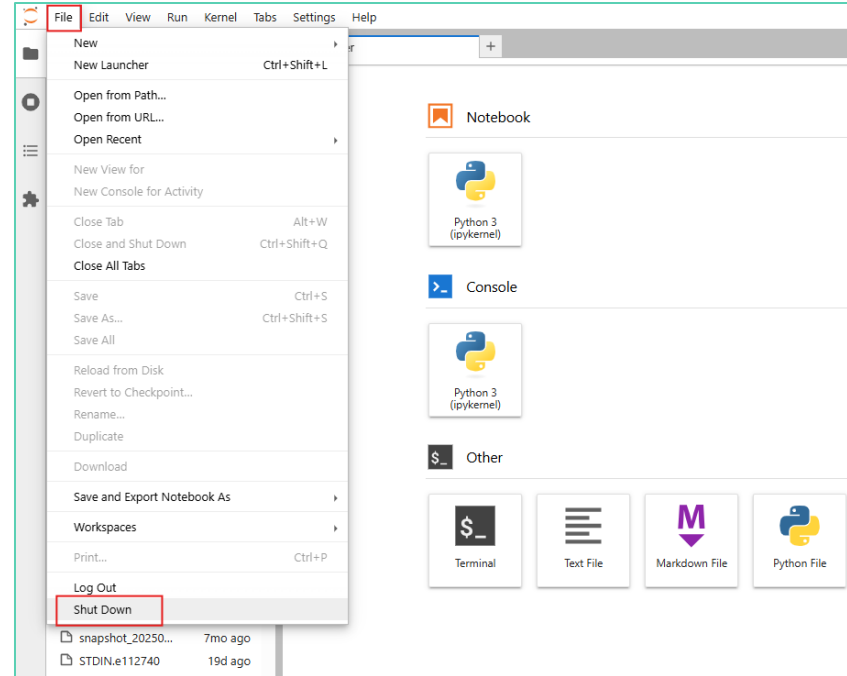


Interacting with WebApps

Jupyter Notebook

1. The WebApp may or may not have an authentication system. Information about interacting with the WebApp will be published in the job output file.
2. To close the job, Click on 'File' -> 'Shut Down', or the job can be terminated directly from the 'Jobs' page.

☐	Job Id	Name	Status	Creation Time
☐	116543.pbs111	Jupyter	Completed	12/22/2025, 6:36:47 PM



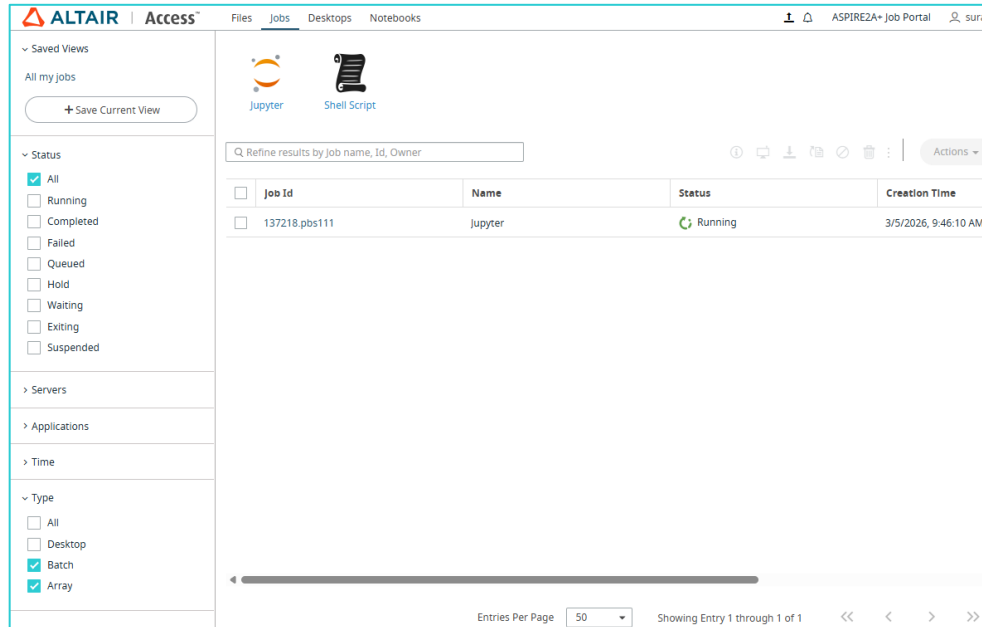
JOB MONITORING ON ASPIRE2A+ JOB PORTAL

Monitor Jobs

- After the job files are uploaded, the job is submitted and displayed on the Job Monitoring.
- The following can be monitored on the Jobs Tab:
 - Status of the jobs
 - Filter the job view
 - View job details
 - Monitor memory and core utilization
 - View a list of job files
 - Perform job actions

Job Monitoring View

- Job status and the job result can be viewed via the Jobs tab. Job status will indicate whether a job is in queue, execution, or completed stage. By default, only 100 jobs are listed in the Job Monitoring.



Monitor Jobs

View Job Information

- You can view job information as provided by PAS in the following tabs.

Tab	Description
Summary Tab	View job metadata, result files using the text, plot and image viewer.
Input Tab	View the input files that are provided for the job.
Output Tab	View the job result files that are generated after the job is completed
Running Folder Tab	View the files of a running job
Details Tab	View the job properties information like Job ID, Job Name, CPUs requested, Application, CPU percent used & Memory used.
Diagnostics Tab	View the job diagnostics information which helps you to troubleshoot the issues.
Console Tab	This tab is displayed only when Custom Actions are performed on the job

Monitor Jobs

View Job Summary

1. Clicking the **'Jobs'** tab will display the job monitoring page with the list of submitted jobs.
2. Perform one of the following options:
 - Click on the respective **job id** from the list.
 - Right click on the job and click **'View Details'** from the context menu.
3. The **'Job Summary'** tab is displayed, providing the following details:
 - Job Metadata
 - Job Results

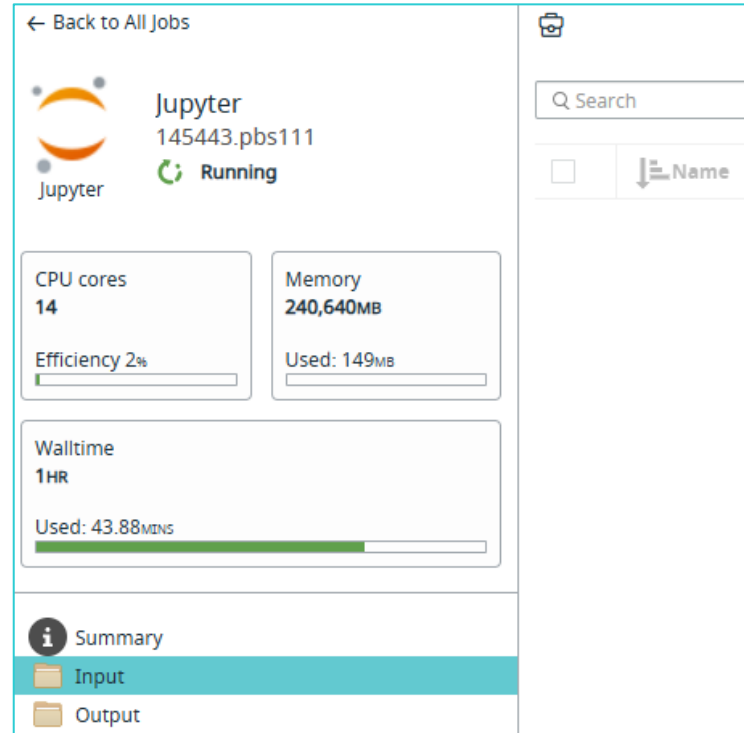
The screenshot displays the Altair Access web interface. The top navigation bar includes 'Files', 'Jobs', 'Desktops', and 'Notebooks'. The 'Jobs' tab is active, showing a list of jobs. A job with ID '137218.pbs111' is highlighted, and its status is 'Running'. The job details panel on the right shows the job's progress, including CPU cores (14), memory usage (240,640MB), and a log of events. The log shows successful linking of extensions and loading of the JupyterLab application. The 'Summary' tab is selected in the left sidebar, and the 'Text' tab is selected in the right sidebar. The log text shows the following sequence of events:

```
1 [I 2026-03-05 04:28:51.704 ServerApp] jupyter_lsp | extension was successfully linked.
2 [I 2026-03-05 04:28:51.708 ServerApp] jupyter_server_terminals | extension was successfully linked.
3 [I 2026-03-05 04:28:51.713 ServerApp] jupyterlab | extension was successfully linked.
4 [I 2026-03-05 04:28:51.716 ServerApp] notebook | extension was successfully linked.
5 [I 2026-03-05 04:28:51.717 ServerApp] Writing Jupyter server cookie secret to /scratch/pbs_scratch/pbs.137218.pbs111.x86/jupyter_
6 [I 2026-03-05 04:28:51.906 ServerApp] notebook_shim | extension was successfully linked.
7 [I 2026-03-05 04:28:51.917 ServerApp] notebook_shim | extension was successfully loaded.
8 [I 2026-03-05 04:28:51.919 ServerApp] jupyter_lsp | extension was successfully loaded.
9 [I 2026-03-05 04:28:51.920 ServerApp] jupyter_server_terminals | extension was successfully loaded.
10 [I 2026-03-05 04:28:51.922 LabApp] JupyterLab extension loaded from /usr/local/lib/python3.11/dist-packages/jupyterlab
11 [I 2026-03-05 04:28:51.923 LabApp] JupyterLab application directory is /usr/local/share/jupyterlab
12 [I 2026-03-05 04:28:51.923 LabApp] Extension Manager is 'pypl'.
13 [I 2026-03-05 04:28:51.972 LabApp] Extensions will be fetched using proxy, proxy host and port: ('10.104.4.124', '10104')
14 [I 2026-03-05 04:28:51.975 ServerApp] jupyterlab | extension was successfully loaded.
15 [I 2026-03-05 04:28:51.978 ServerApp] notebook | extension was successfully loaded.
16 [I 2026-03-05 04:28:51.979 ServerApp] Serving notebooks from local directory: /home/users/adm/sup/surajk
17 [I 2026-03-05 04:28:51.979 ServerApp] Jupyter Server 2.16.0 is running at:
18 [I 2026-03-05 04:28:51.979 ServerApp] http://127.0.0.1:7476/pbsworks/notebook/137218.pbs111/lab/lab?token=...
19 [I 2026-03-05 04:28:51.979 ServerApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
20 [I 2026-03-05 04:28:51.979 ServerApp] No web browser found: Error('could not locate runnable browser').
21 [W 2026-03-05 04:28:51.984 ServerApp] Skipped non-installed server(s): bash-language-server, dockerfile-language-server-nodejs, j
22 [I 2026-03-05 04:28:51.995 ServerApp]
```

Monitor Jobs

View Job Input Files

1. Clicking the **'Jobs' tab** will display the job monitoring page with the list of submitted jobs.
2. Perform one of the following options:
 - Click on the respective **job id** from the list.
 - **Right click on the job** and click **'View Details'** from the context menu.
3. Click **'Input tab'**. The job input files' location, and the files will be displayed.
4. Here, job input files can be viewed, edited, saved, downloaded, tailed, and deleted.



Monitor Jobs

View Job Output Files

1. Clicking the **'Jobs'** tab will display the job monitoring page with the list of submitted jobs.
2. Perform one of the following options:
 - Click on the respective **job id** from the list.
 - **Right click on the job** and click **'View Details'** from the context menu.
3. Click **'Output'** tab. The job result files' location, and files will be displayed
4. Here, job result files can be viewed, edited, saved, downloaded, tailed, and deleted.



Note: Similarly, you can view other details such as Running job files, job details and diagnostics by switching to the different tab present in the context menu.

The screenshot displays the 'Jupyter' job monitoring page. The job ID is 145443.pbs111 and it is in a 'Running' state. Key metrics shown include 14 CPU cores, 240,640MB memory, and a 1HR walltime. A context menu is open at the bottom, with the 'Output' tab highlighted. The right sidebar shows a list of files available for viewing, including 'runtime', 'access.log', 'job.env', 'jpserver-14-open.html', 'jpserver-14.json', 'Jupyter.e145443', 'Jupyter.o145443', and 'jupyter_cookie_secret'.

MANAGE FOLDERS AND FILES

Manage Folders and Files

- The **'Files'** tab will provide the following functionality:
 - Search box to search for the required directory or file.
 - At the top of the file list view, type the folder path if knowing the exact location of the file.
 - Add to 'favourites' for quick access
 - Quick navigation to home directory by clicking 
- Users can perform the following operations as needed:
 1. Create a Folder
 2. Upload a File
 3. Move a Folder or a File
 4. View and Edit text File
 5. File Operations
 6. Download and Delete Folder or File
 7. Zip and Unzip Files and Folders

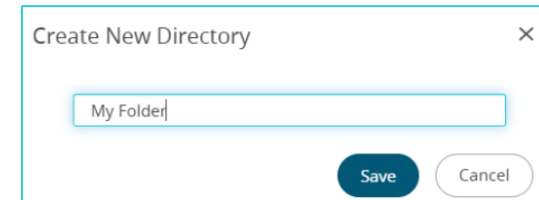


Note: For detailed description of all the other operations, please refer to the guides available in the "Help" link at the profile section.

Manage Folders and Files

Create a Folder

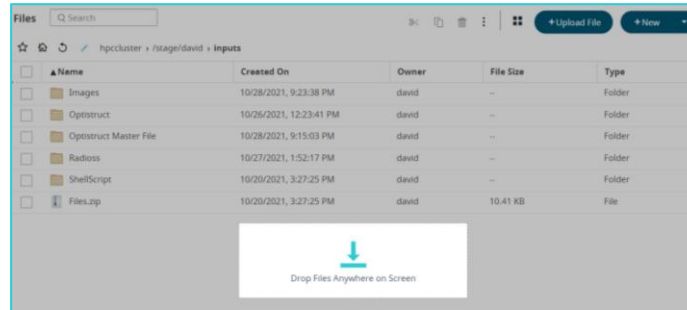
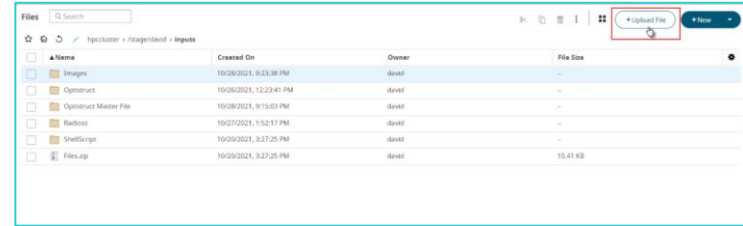
- To **organize jobs** by creating folders or subfolders, follow these steps:
 1. Click the **'Files' tab** and use the file system tree on the left to navigate to where new folder is to be created.
 2. Perform one of the following options:
 - Click **'New'** and select 'Folder' from the menu.
 - **Right-click in a blank space** in the folder list and select 'New Folder'.
 3. A **dialog Box** will appear requesting the name of the folder to be created.
 4. Click **Save**.



Manage Folders and Files

Upload a File

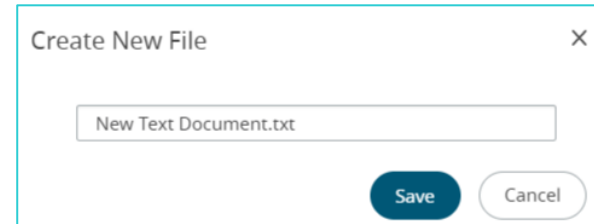
- To upload a file **stored on your local machine** to **ASPIRE2A+**, follow these steps:
 - Click the **'Files'** tab and use the file system tree on the left to navigate to where the file should be uploaded.
 - Click on **'Upload File'** and a dialog box will appear.
 - Browse and select** the file to upload.
 - If it is a **zip file**, there will be an option provided to unzip and **extract** the contents of the zip file
 - Click **'Open'**.
 - Files can also be uploaded by dragging and dropping them from your machine to the folder.



Manage Folders and Files

Create and Edit a File

- To **Create a file** for running a job script, job master file, or to provide remarks for a particular folder follow these steps:
 1. Click the **'Files'** tab and use the file system tree on the left to navigate to where new file is to be created.
 2. To create a new file, use one of the following options:
 - **Click 'New'** and select File from the menu.
 - **Right-click at the blank space** in the folder list and select 'New File'.
 3. Enter the name of the file and **click 'Save'**.
 4. Choose any of the following options to open the file:
 - If the file is to be opened in the **default application**,
 - To open the file, either **double-click** on it or **right-click and choose 'Open'** from the context menu
 - If choosing an application or setting a default application is necessary to open the file , right-click the file and select 'Open With'.
 5. Click  to edit the file and Save it.



PERSONALIZATION

Job Profile

Create a Job Profile

- This is a customized shortcut for submitting a job with pre-filled attributes. Follow these steps to create a job profile:
 1. Click the **'Jobs'** and a list of applications are displayed at the top of the **Job Monitoring page**.
 2. **Select** the application to view the job submission form.
 3. Fill in the **application arguments as per the profile's need**.
 4. Click **'Save Profile'**. The Save Profile dialog box will appear with a prompt to provide the profile name.
 5. **Check the box 'Default Profile'** if setting it as the default to load whenever application is opened.
 6. Click **'Save'**. The saved profile will be listed in the drop-down list.

The 'Create a New Job' dialog box contains the following fields and controls:

- Saved Profiles:** A dropdown menu showing 'Generic Profile' and a 'Save this Profile' button (highlighted with a red rectangle).
- Jupyter:** A checkbox labeled 'Manage Profiles'.
- Show all parameters:** A toggle switch.
- Container Image:** A dropdown menu showing 'docker.io/tensorflow/t...'.
- Number of Nodes:** A numeric input field with a value of '1' and '+'/'-' buttons.
- Queue:** A text input field with the value 'normal'.
- GPUS:** A dropdown menu with the value '2'.
- CPU Cores:** A numeric input field with a value of '14' and '+'/'-' buttons.
- Memory (GB):** A numeric input field with a value of '25' and '+'/'-' buttons.
- Is GPU Required?:** A checkbox that is checked.
- Walltime:** A text input field with the value '01:00:00'.
- Project:** A text input field with the value 'test_prj'.
- Buttons:** 'Cancel' and 'Submit' (with a checkmark icon).

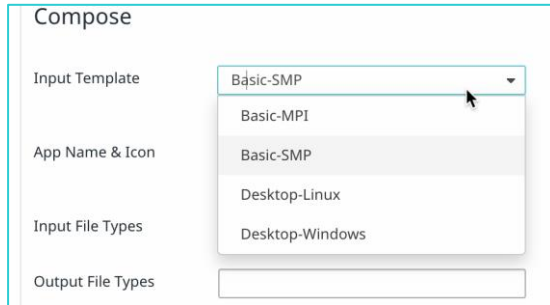
The 'Save Profile' dialog box contains the following fields and controls:

- Profile Name:** A text input field with the value 'Generic Profile' (highlighted with a blue rectangle).
- Default Profile:** A checkbox.
- Buttons:** 'Save' and 'Cancel'.

App Composer

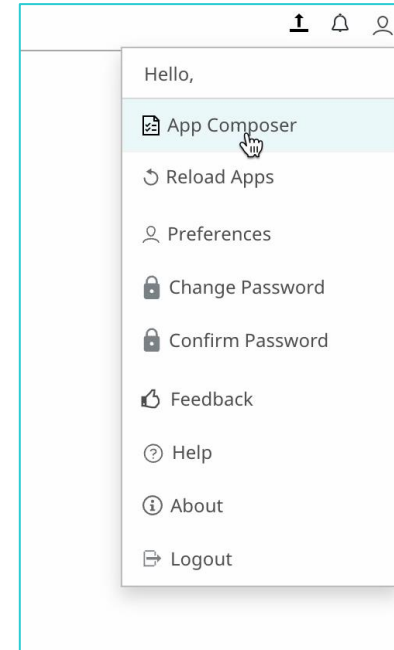
Create an Application Job Definition

- Applications can be added manually to launch them quickly from the login page.
- To create a new application, click on the 'Profile icon' and then click on 'App Composer'.
- On the Compose page, select the application type. For the Job Portal, choose between Basic MPI or SMP, and for the Visualization Portal, select Desktop-Linux.



The 'Compose' page features a form with the following elements:

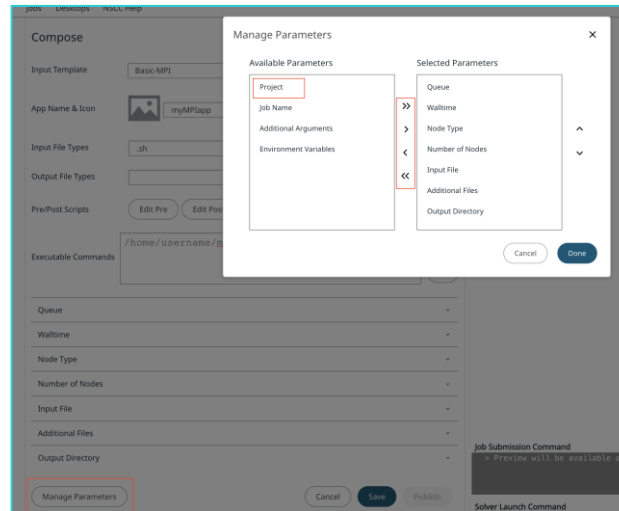
- Input Template:** A dropdown menu currently showing 'Basic-SMP'. A mouse cursor is hovering over it, and a list of options is displayed: 'Basic-MPI', 'Basic-SMP' (highlighted), 'Desktop-Linux', and 'Desktop-Windows'.
- App Name & Icon:** A text input field.
- Input File Types:** A text input field.
- Output File Types:** A text input field.



App Composer

Create an Application Job Definition

- In the 'Executable Commands' field, provide the executable commands with the complete path to the binary.
- Checking the 'required' switch will make that field mandatory in the job form.
- Ensure that Walltime and Project are included as required fields. To manage any fields that are not already visible, click on 'Manage Parameters' and add or remove fields as needed.



App Composer

Create an Application Job Definition

- After creating the application, preview the form on the right-side pane and submit a test job by filling out the form to see the commands in real-time. Once satisfied, click the "Save" button, and the application will be added to the application list.
- To delete or modify an already created application, go to the Composer and hover over the application in the left-side pane. Thereafter click on 'delete' or 'edit'.

The screenshot displays the App Composer interface, divided into two main sections: 'Compose' and 'Preview & Test'.

Compose Section:

- Input Template:** A dropdown menu showing 'Basic-MPI'.
- App Name & Icon:** A text input field containing 'myMPIapp' next to an icon placeholder.
- Input File Types:** A text input field containing '.sh'.
- Output File Types:** An empty text input field.
- Pre/Post Scripts:** Two buttons labeled 'Edit Pre' and 'Edit Post'.
- Executable Commands:** A text area containing the command `/home/username/myMPIapp $(Input File)`. A '+4' button is to the right.
- Configuration List:** A series of expandable sections for 'Project', 'Walltime', 'Queue', 'Number of Nodes', 'Input File', 'Additional Files', and 'Output Directory'.
- Buttons:** 'Manage Parameters', 'Cancel', 'Save' (highlighted with a red box), and 'Publish'.

Preview & Test Section:

- myMPIapp:** The application name.
- Show All / Reset:** A toggle switch and a button.
- Executable Commands:** A text area showing `/home/username/myMPIapp $(Input File)`.
- Project:** An empty text input field.
- Walltime:** A text input field showing '5:00:00'.
- Queue:** A dropdown menu showing 'normal'.
- Number of Nodes:** A text input field with a dropdown arrow.
- Input File:** A section with a 'My Computer' link and a file icon.
- Additional Files:** A section with a 'My Computer' link and a file icon.
- Output Directory:** A text input field showing '[Default]' with a file icon.
- Job Submission Command:** A section with a note: 'Preview will be available after saving application'.
- Solver Launch Command:** A text area showing `> /home/username/myMPIapp ""`.

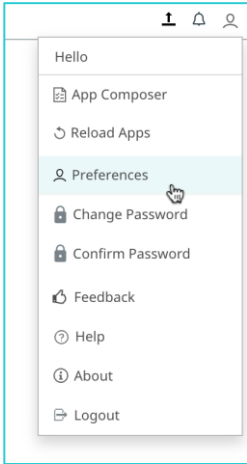
Preferences

Personalize Altair Access Web experience

- Preference settings can be accessed from the profile button on the top right corner of the portal interface. Note that preferences for the Job Portal and the Visualization Portal need to be set individually.
- The Preferences allow for the following personalization features to be set by a user for themselves:

Preferences

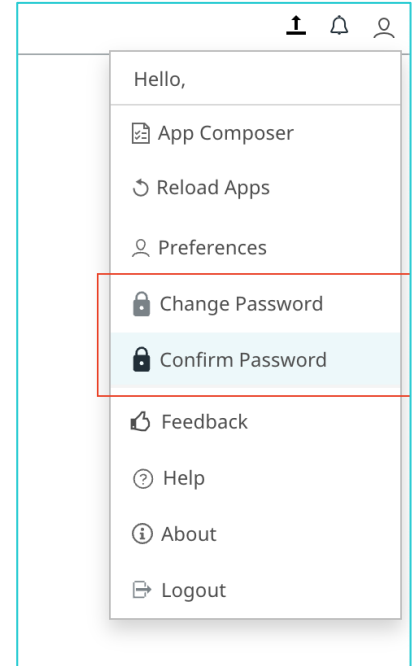
Theme	Change font size of the interface
Profile	Set Display name and set email ID to send Email Notifications
Notifications	Turn notifications ON or OFF which are displayed on screen
Files	Show / Hide hidden items in File Explorer
Job Submission	Set E-Mail notifications and change default behaviors of job submission form
Pagination	Set page size after which new page is added in file viewer
Tail Frequency	Set time to refresh live output in seconds
RVS	RVS is not enabled in ASPIRE2A+
Desktops	Set default resolution and enable debugging
Diagnosis	Reset all preferences



Password Management

Changing and Confirming Password

- While Access Web allows users to change their Linux Password on ASPIRE2A+ system, it may not update in LDAP system. **Hence, users are strictly recommended to NOT to use this feature on Access Web Portals on ASPIRE2A+.**
- Instead, follow the procedures explained on help.nsc.sg regarding password management and expiry.
- Users can still use “Confirm Password” feature to verify their password.



Documentations and Further Help

- The 'Help' link provides access to detailed documentation available on 'help.altair.com', where users can find additional help topics, how-to guides, and comprehensive guides for Altair Access Web.
- Access additional help documents and FAQs regarding ASPIRE2A+. Or submit help queries to the 'Help Desk' through NSCC Singapore's user site (help.nscg.sg), accessible via the 'NSCC Help' button at the tabs area of both Access Web Portals.

