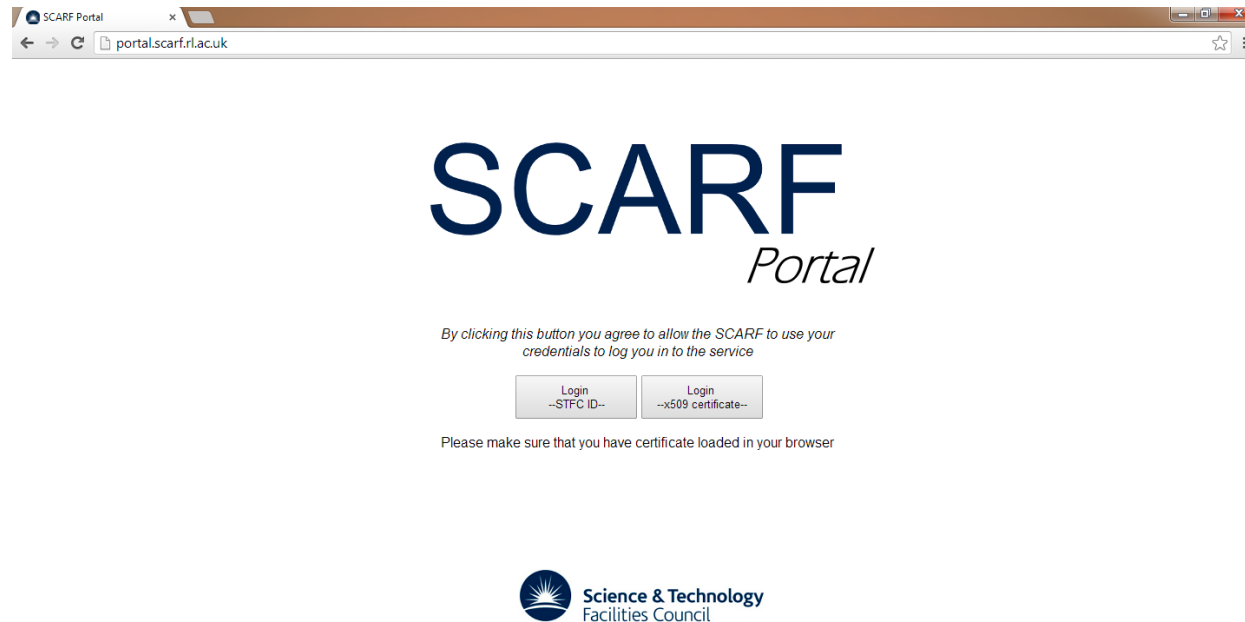


SCARF Web Portal – A quick guide

To login to SCARF portal, you don't need any additional accounts. If you are registered to use SCARF, you should be able to login. The URL is <http://portal.scarf.rl.ac.uk>

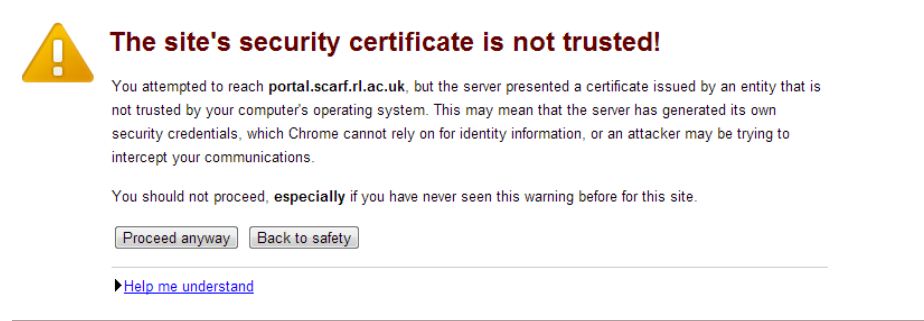
As there are two types of users that access SCARF, so there are two different types of login methods.

- 1) Login using STFC federal ID. This option is for users who are internal to STFC
- 2) Login using x509 certificate. This option is for external users who currently login using GSISSH term or other mechanisms.



SCARF Portal User guide

Once you click on the relevant button, you may see a message similar to that below depending on which browser you are using to access the portal.



Certificate not trusted warning screen

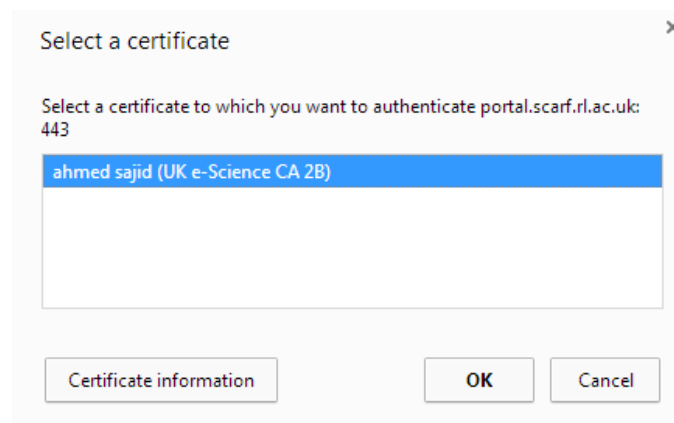
This screen can safely be ignore and you can continue the login process by clicking on “Proceed anyway”.

If you are logging in using your federal ID and password, you will see a similar pop-up to the one below.

A screenshot of an "Authentication Required" pop-up dialog. It has a title bar with a close button (X). The text inside says "The server https://portal.scarf.rl.ac.uk:443 requires a username and password." Below this are two input fields: "User Name:" with the text "<federalID>" and "Password:" with masked characters "*****". At the bottom are "Log In" and "Cancel" buttons.

Federal ID prompt pop-up

If you wish to login using your x509 certificate, you need to make sure is that your certificate is loaded in your browser. You will see a pop-up similar to the following one:

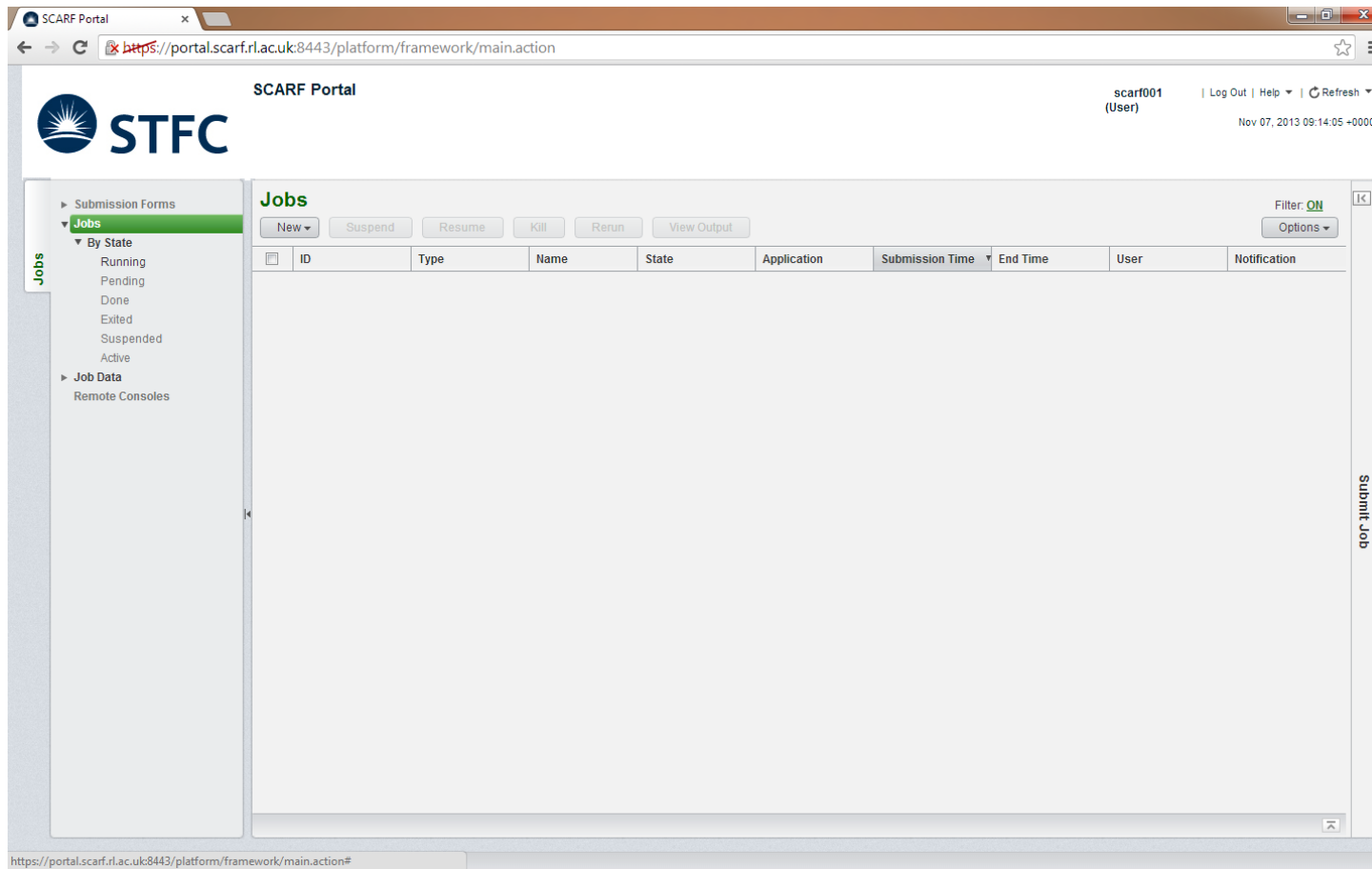


Select a certificate pop-up

SCARF Portal User guide

Submitting job

Once your authentication is successful, you should be able to see the screen below.



SCARF Portal screen

If you have any jobs submitted to the queue you can see them by clicking on the relevant state.

SCARF Portal User guide

A number of templates are provided under Submission Forms in the menu on the left hand side. If the job does not match any of the application specific templates then the generic template should be used.

The image below shows how `bsub -J test -o %J.out -e %J.err echo "test"` which submits a very simple job would be implemented in the portal

The screenshot displays the SCARF Portal interface. On the left, a sidebar contains a 'Submission Forms' menu with 'generic' highlighted, and a 'Jobs' menu with various states like 'Running', 'Pending', 'Done', etc. The main content area is titled 'Submit a job: generic'. It includes a 'Basic Job Options' section with a 'Command to run' field containing 'echo "test"', a 'Job Name' field with 'test', and a 'Notify me when job status changes' dropdown set to 'On'. Below this is an 'Advanced' section with a 'Data' subsection. The 'Data' section has fields for 'Input file', 'Output file' (containing '%J.out'), and 'Error file' (containing '%J.err'), each with a 'Browse...' button. At the top of the form area are 'Submit', 'Save As', and 'Delete' buttons. At the bottom are 'Submit' and 'Revert' buttons. The browser's address bar shows the URL 'https://portal.scarf.rl.ac.uk:8443/platform/framework/main.action'.

Job example – Submission page

SCARF Portal User guide

The screenshot displays the SCARF Portal interface. The browser address bar shows the URL `https://portal.scarf.rl.ac.uk:8443/platform/framework/main.action`. The page header includes the STFC logo, the text "SCARF Portal", and user information: "scarf001 (User)" with links for "Log Out", "Help", and "Refresh". The date and time "Nov 07, 2013 14:37:29 +0000" are also displayed.

The left sidebar contains a navigation menu with the following items:

- Submission Forms
 - generic
- Jobs
 - By State
 - Running
 - Pending
 - Done
 - Exited
 - Suspended
 - Active
 - Job Data
 - Remote Consoles

The main content area displays job details for Job ID 810555. The job name is "test", the status is "Pending", and the submission time is "2013-11-07 14:37:28". The description is empty. Action buttons include "View Output", "Suspend", "Resume", "Rerun", "Kill", and "Resubmit". A "More Details" section is expanded, showing a table with one file entry:

File Name	File Size	File Type	Date Modified
tail			

The location of the file is `/home/scarf001/test_1383835048055Y25V0/`.

Job example – showing the status of job

SCARF Portal User guide

The screenshot displays the SCARF Portal interface. At the top, the STFC logo is on the left, and the user 'scarf001 (User)' is logged in on the right. A sidebar on the left contains a 'Jobs' menu with options like 'Submission Forms', 'generic', 'Jobs', 'By State', 'Running', 'Pending', 'Done' (highlighted), 'Exited', 'Suspended', 'Active', 'Job Data', and 'Remote Consoles'. The main area is titled 'Jobs' and features a table of job entries. The table has columns for ID, Type, Name, State, Application, Submission Time, End Time, User, and Notification. A single job is listed with ID 810555, Type Job, Name test, State Done, Application generic.generic, Submission Time 2013-11-07 14:3..., End Time 2013-11-07 14:3..., User scarf001, and Notification Yes. Below the table, a section titled 'Job: test (810555)' provides a summary of the job details, including Job ID, Job Name, Job Status, and Submission Time. It also includes a 'More Details' section with buttons for Tail, View, Upload, Download, Copy To, Move To, and More Actions. The bottom of the page shows a file list with columns for File Name, File Size, File Type, and Date Modified.

SCARF Portal

scarf001 (User) | Log Out | Help | Refresh

Nov 07, 2013 14:37:53 +0000

Jobs

Filter: **On**

Options

ID	Type	Name	State	Application	Submission Time	End Time	User	Notification
810555	Job	test	Done	generic.generic	2013-11-07 14:3...	2013-11-07 14:3...	scarf001	Yes

Job: test (810555)

Summary

Job ID: 810555
Job Name: test
Job Status: Done
Submission Time: 2013-11-07 14:37:28
Start Time: 2013-11-07 14:37:30

More Details

Tail View Upload Download Copy To Move To More Actions

Location: /home/scarf001/test_1383835048055Y25V0/

File Name	File Size	File Type	Date Modified
-----------	-----------	-----------	---------------

Job example – showing completed job

Abaqus Example:

There are several Abaqus job submission forms corresponding to the different versions available on SCARF.

The screenshot shows the SCARF Portal interface in a web browser. The browser's address bar displays the URL: `https://portal.scarf.rl.ac.uk:8443/platform/framework/main.action#`. The page header includes the STFC logo, the text 'SCARF Portal', and user information: 'scarf165 (Administrator)' with links for 'Log Out' and 'Help'. A timestamp 'Jan 24, 2014 09:27:17 +0000' is also present.

The left sidebar contains a navigation menu with the following items: 'Submission Forms' (expanded), 'Jobs', 'Resources', 'Settings', and 'Reports'. Under 'Submission Forms', 'ABAQUS-6-10' and 'ABAQUS-6-11-1' are listed, with 'ABAQUS-6-11-1' selected. Under 'Jobs', 'By State' and 'Job Data' are listed. Under 'Job Data', 'Remote Consoles' is listed.

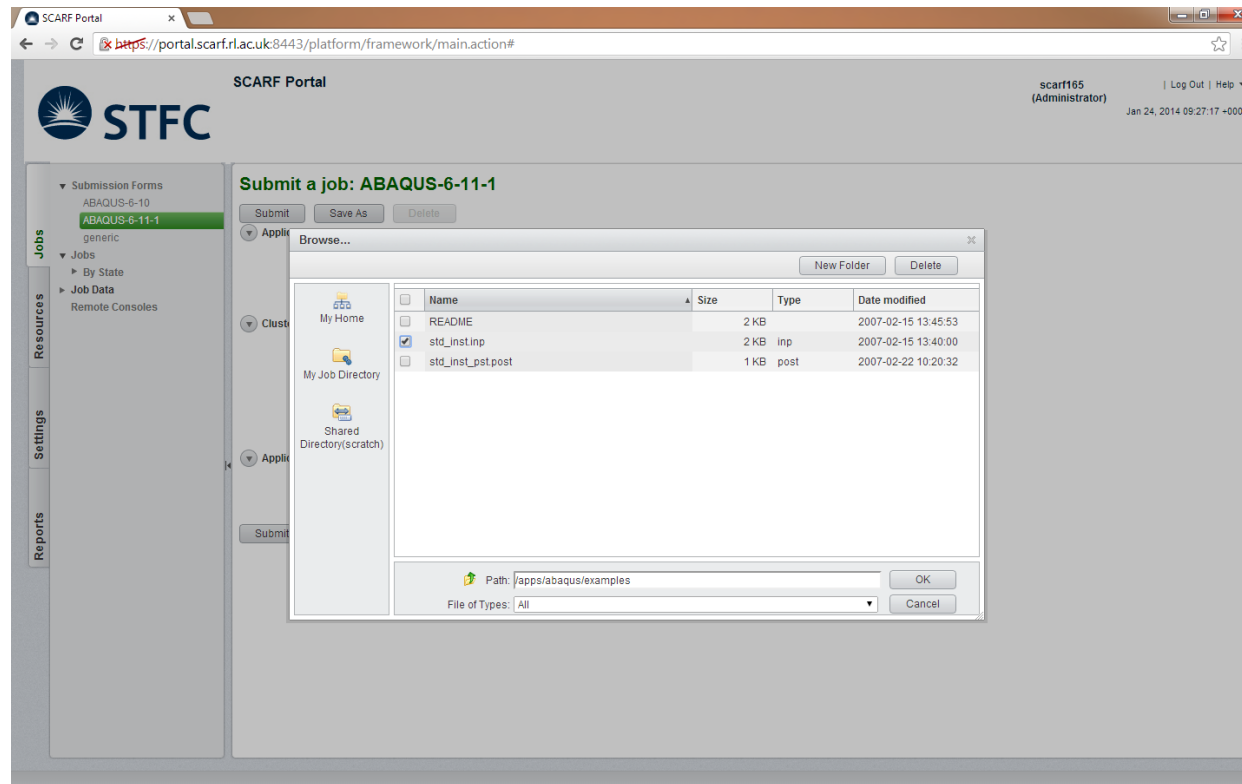
The main content area is titled 'Submit a job: ABAQUS-6-11-1'. It features a 'Submit' button, a 'Save As' button, and a 'Delete' button. Below these are several sections for configuring the job:

- Application Parameters:** Includes fields for 'Job Name' (containing 'test'), 'Memory(MB)', and 'Additional ABAQUS Options'.
- Cluster Parameters:** Includes a 'Notify me when job status changes' dropdown (set to 'On'), 'CPUs' (set to '<Use Default>'), 'Memory Architecture' (set to '<Use Default>'), 'Queue' (set to '<Use Default>'), and 'Additional Parameters'.
- Application Data Files:** Includes 'Add Local File' and 'Add Server File' buttons, and a field for '.inp Input File' with a file selection icon.

At the bottom of the form are 'Submit' and 'Revert' buttons.

Abaqus job submission form

SCARF Portal User guide



Selecting Input file

You can either upload file from your machine by clicking on “Add Local File” or use one that already exists on SCARF by clicking on “Add Server File”. In the screenshot shown, the example input file is chosen located under /apps/abaqus/examples.

SCARF Portal User guide

The screenshot shows the SCARF Portal interface in a web browser. The browser's address bar displays the URL `https://portal.scarf.rl.ac.uk:8443/platform/framework/main.action#`. The page header includes the STFC logo, the text "SCARF Portal", and user information: "scarf165 (Administrator)" with links for "Log Out" and "Help". A timestamp "Jan 24, 2014 09:27:46 +0000" is also present.

The left sidebar contains a navigation menu with the following items: "Submission Forms" (expanded), "Jobs", "Resources", "Settings", and "Reports". Under "Submission Forms", the following options are listed: "ABAQUS-6-10", "ABAQUS-6-11-1" (highlighted), "generic", "Jobs", "By State", "Job Data", and "Remote Consoles".

The main content area is titled "Submit a job: ABAQUS-6-11-1" and contains the following sections:

- Application Parameters:** Includes fields for "Job Name" (containing "test"), "Memory(MB)", and "Additional ABAQUS Options".
- Cluster Parameters:** Includes a dropdown for "Notify me when job status changes" (set to "On"), and dropdowns for "CPUs", "Memory Architecture", and "Queue", all set to "<Use Default>". There is also a field for "Additional Parameters".
- Application Data Files:** Includes buttons for "Add Local File" and "Add Server File", and a field for ".inp Input File" with a file selection icon.

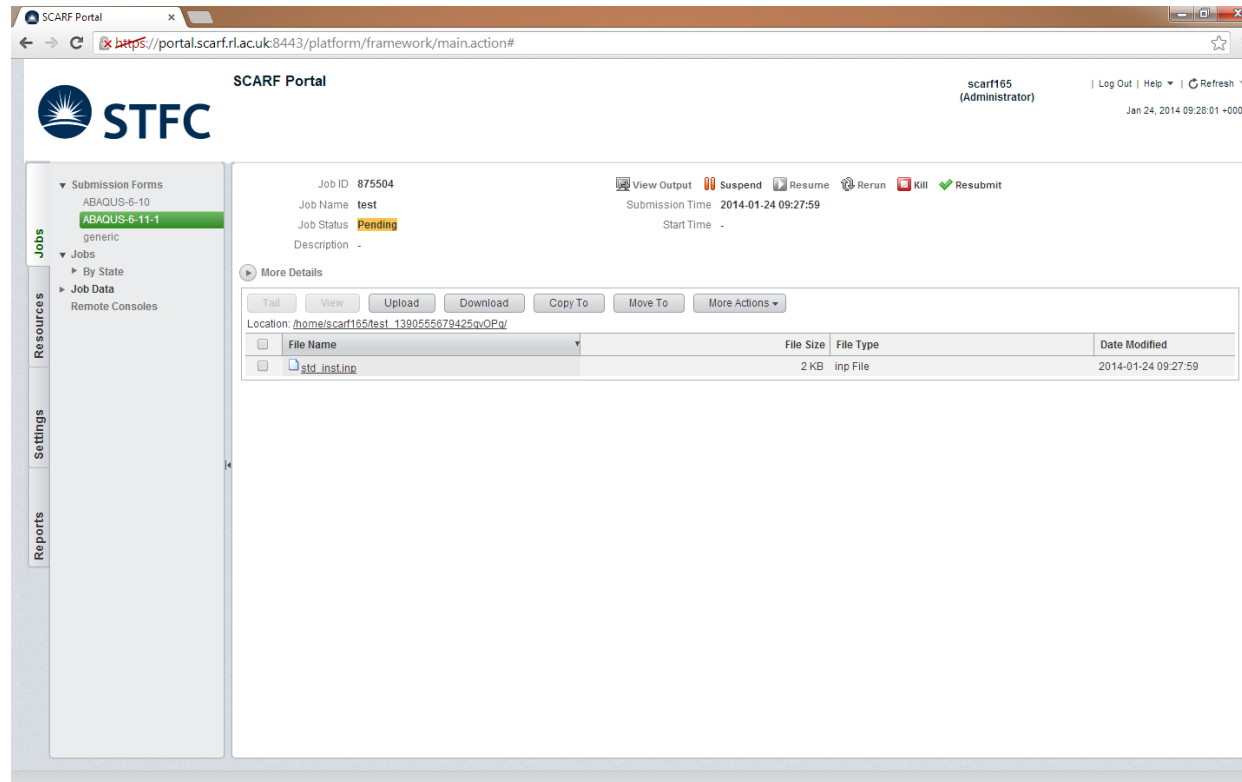
At the bottom of the form are "Submit" and "Revert" buttons.

Abaqus job submission form

If no additional parameters are specified, the job will be submitted with the default ones.

SCARF Portal User guide

The following screen appears after submitting the job.



The screenshot displays the SCARF Portal interface. The top navigation bar includes the STFC logo, the text 'SCARF Portal', and user information for 'scarf165 (Administrator)' with a 'Log Out' link and a 'Refresh' button. The left sidebar contains a 'Jobs' section with a tree view showing 'Submission Forms' (ABAQUS-6-10, ABAQUS-6-11-1, generic) and 'Jobs' (By State, Job Data, Remote Consoles). The main content area shows job details for Job ID 875504, Job Name 'test', and Job Status 'Pending'. It includes a 'More Details' section with a table of files. The table has columns for File Name, File Size, File Type, and Date Modified. The file 'std_inst.log' is listed with a size of 2 KB and a type of 'inp File', modified on 2014-01-24 09:27:59. Above the table are buttons for 'Tail', 'View', 'Upload', 'Download', 'Copy To', 'Move To', and 'More Actions'. The location path is '/home/scarf165/test_1380555678425qOPa/'. The bottom right corner of the page has a small orange triangle icon.

SCARF Portal

scarf165 (Administrator) | Log Out | Help | Refresh

Jan 24, 2014 09:28:01 +0000

Job ID: 875504
Job Name: test
Job Status: Pending
Submission Time: 2014-01-24 09:27:59
Start Time: -

View Output | Suspend | Resume | Rerun | Kill | Resubmit

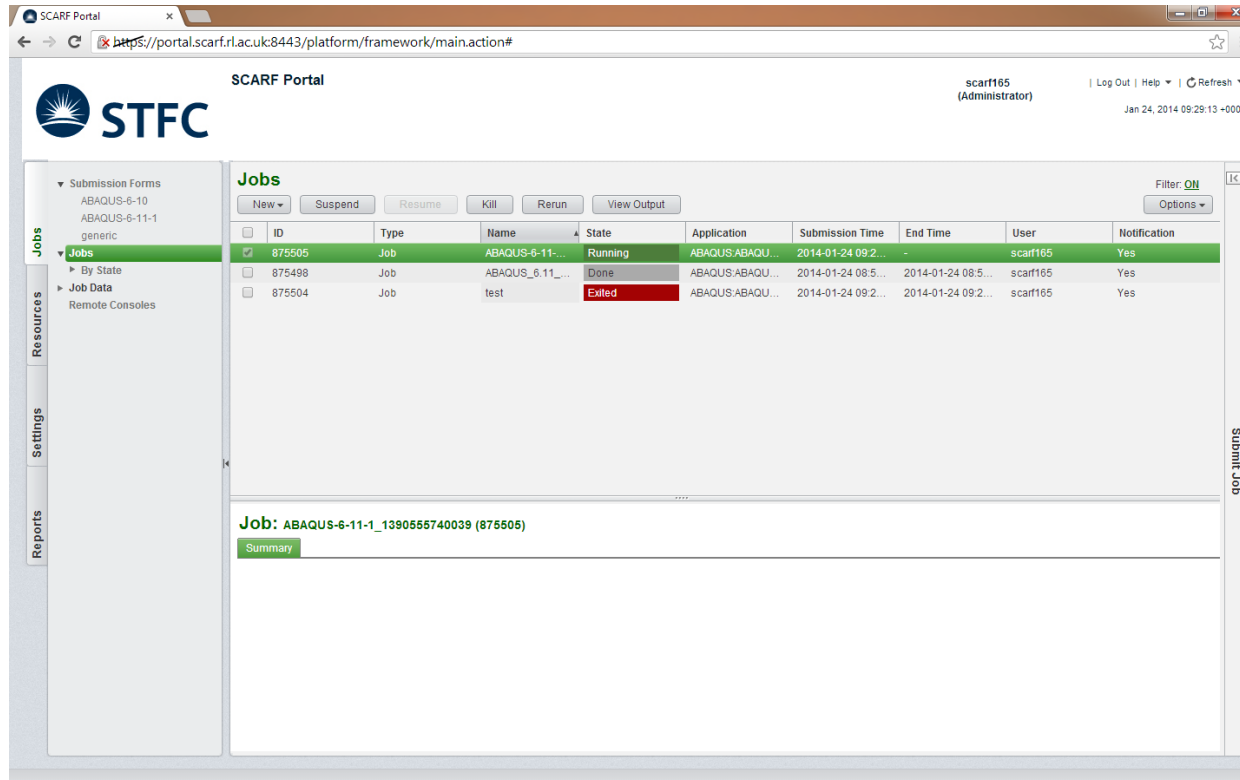
More Details

Location: /home/scarf165/test_1380555678425qOPa/

File Name	File Size	File Type	Date Modified
std_inst.log	2 KB	inp File	2014-01-24 09:27:59

Job pending status page

SCARF Portal User guide



The screenshot displays the SCARF Portal interface. The top header includes the STFC logo, the text "SCARF Portal", and user information for "scarf165 (Administrator)" with a "Log Out" link and a "Refresh" button. The date "Jan 24, 2014 09:29:13 +0000" is also shown. A left sidebar contains navigation links: "Submission Forms" (with sub-links "ABAQUS-6-10" and "ABAQUS-6-11-1 generic"), "Jobs" (selected), "By State", "Job Data", "Remote Consoles", "Resources", "Settings", and "Reports". The main content area is titled "Jobs" and features a table of job statuses. Above the table are buttons for "New", "Suspend", "Resume", "Kill", "Rerun", and "View Output". A "Filter: ON" button is located to the right of the table. The table has columns for "ID", "Type", "Name", "State", "Application", "Submission Time", "End Time", "User", and "Notification". Three jobs are listed: ID 875505 (Running), ID 875498 (Done), and ID 875504 (Exited). Below the table, a section titled "Job: ABAQUS-6-11-1_1390555740039 (875505)" contains a "Summary" button. A "Submit Job" button is located on the right side of the page.

ID	Type	Name	State	Application	Submission Time	End Time	User	Notification
<input checked="" type="checkbox"/> 875505	Job	ABAQUS-6-11-...	Running	ABAQUS:ABAQU...	2014-01-24 09:2...	-	scarf165	Yes
<input type="checkbox"/> 875498	Job	ABAQUS_6.11_...	Done	ABAQUS:ABAQU...	2014-01-24 08:5...	2014-01-24 08:5...	scarf165	Yes
<input type="checkbox"/> 875504	Job	test	Exited	ABAQUS:ABAQU...	2014-01-24 09:2...	2014-01-24 09:2...	scarf165	Yes

Job: ABAQUS-6-11-1_1390555740039 (875505)

[Summary](#)

Job status main page

SCARF Portal User guide

The screenshot displays the SCARF Portal web interface. At the top, the STFC logo is visible on the left, and the user 'scarf165 (Administrator)' is logged in on the right. The main content area is titled 'Jobs' and features a table of job submissions. The table has columns for ID, Type, Name, State, Application, Submission Time, End Time, User, and Notification. Three jobs are listed: 875505 (Done), 875498 (Done), and 875504 (Exited). Below the table, the details for job 875505 are shown, including its name, submission time, and start time. A 'More Details' section provides a list of output files with their names, sizes, types, and modification dates.

ID	Type	Name	State	Application	Submission Time	End Time	User	Notification
875505	Job	ABAQUS-6-11-1_1390555740039	Done	ABAQUS ABAQ...	2014-01-24 09:29:00	2014-01-24 09:29:17Z	scarf165	Yes
875498	Job	ABAQUS_6-11-1_1390555740039	Done	ABAQUS ABAQ...	2014-01-24 08:57:49Z	2014-01-24 08:57:49Z	scarf165	Yes
875504	Job	test	Exited	ABAQUS ABAQ...	2014-01-24 09:28:07Z	2014-01-24 09:28:07Z	scarf165	Yes

File Name	File Size	File Type	Date Modified
std_inst.log	2 KB	inp File	2014-01-24 09:29:00
output_scarf165.txt	2 KB	txt File	2014-01-24 09:29:17
ABAQUS-6-11-1_1390555740039.stt	1660 KB	stt File	2014-01-24 09:29:17
ABAQUS-6-11-1_1390555740039.sta	2 KB	sta File	2014-01-24 09:29:17
ABAQUS-6-11-1_1390555740039.sim	297 KB	sim File	2014-01-24 09:29:17
ABAQUS-6-11-1_1390555740039.res	65 KB	res File	2014-01-24 09:29:17
ABAQUS-6-11-1_1390555740039.prt	1 KB	prt File	2014-01-24 09:29:17
ABAQUS-6-11-1_1390555740039.odt	517 KB	odt File	2014-01-24 09:29:17
ABAQUS-6-11-1_1390555740039.msq	72 KB	msg File	2014-01-24 09:29:17

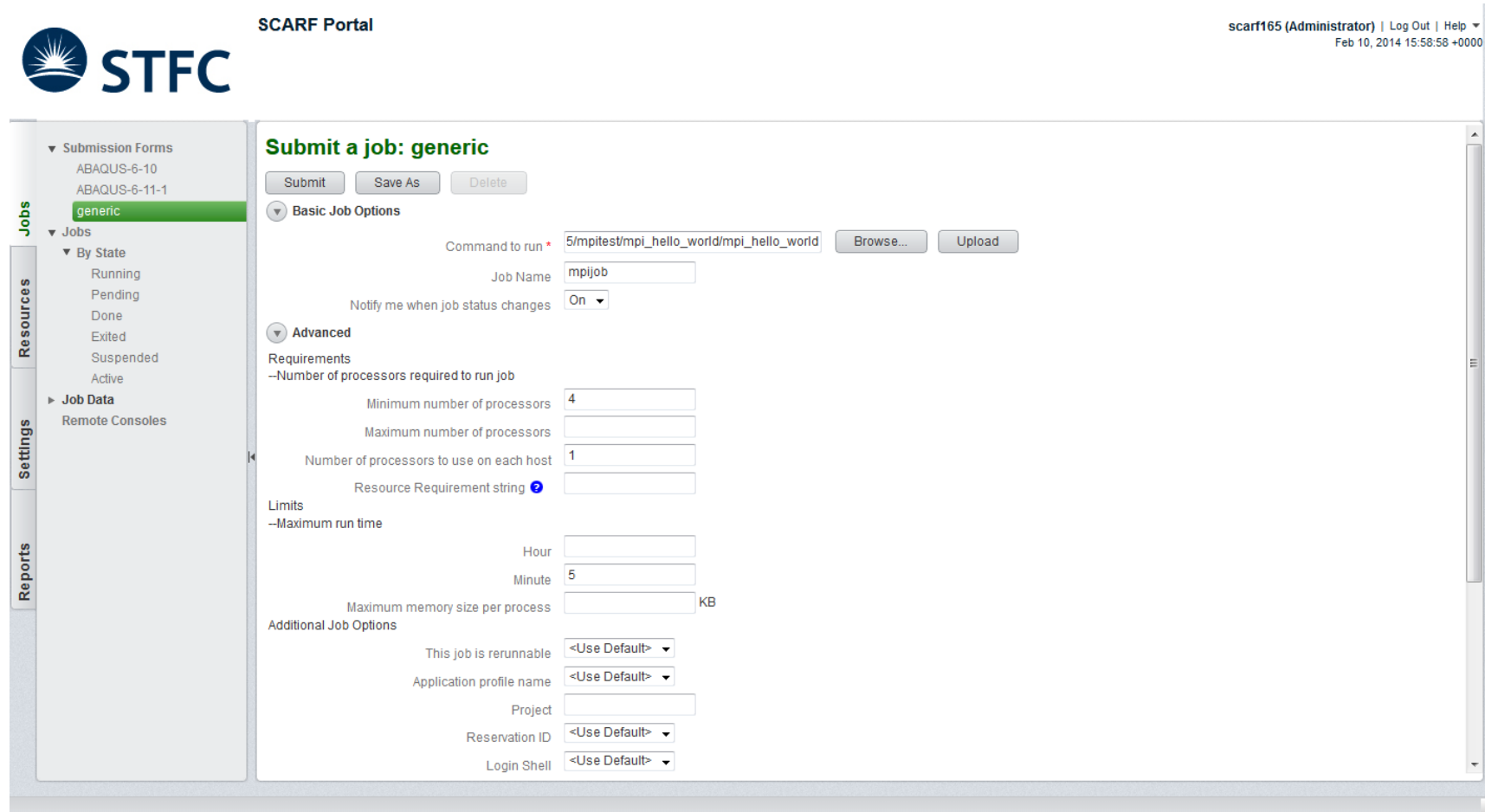
Job status page with output files

After the job gets completed you can view the output files by clicking on the job id from the list.

If you want a submission form created, do send us an email and we will be happy to help.

Submitting MPI job:

In addition to generic and application specific jobs, the portal also accepts MPIJobs.



SCARF Portal

scarf165 (Administrator) | Log Out | Help
Feb 10, 2014 15:58:58 +0000

STFC

Submission Forms
ABAQUS-6-10
ABAQUS-6-11-1
generic

Jobs
By State
Running
Pending
Done
Exited
Suspended
Active

Job Data
Remote Consoles

Submit a job: generic

Submit Save As Delete

Basic Job Options

Command to run * 5/mpitest/mpi_hello_world/mpi_hello_world Browse... Upload

Job Name mpijob

Notify me when job status changes On

Advanced

Requirements

--Number of processors required to run job

Minimum number of processors 4

Maximum number of processors

Number of processors to use on each host 1

Resource Requirement string ?

Limits

--Maximum run time

Hour

Minute 5

Maximum memory size per process KB

Additional Job Options

This job is rerunnable <Use Default>

Application profile name <Use Default>

Project

Reservation ID <Use Default>

Login Shell <Use Default>

MPI job submission page

To submit mpijob the command is, `/opt/platform_mpi/bin/mpirun -lsf -np <numberofprocesses> <mpicommand>`

The screenshot displays the SCARF Portal interface. At the top left is the STFC logo. The top right shows the user 'scarf1165 (Administrator)' with links for 'Log Out' and 'Help', and a timestamp 'Feb 10, 2014 15:58:58 +0000'. A left-hand navigation menu includes sections for 'Jobs', 'Resources', 'Settings', and 'Reports'. Under 'Jobs', there are sub-menus for 'Submission Forms' (listing ABAQUS-6-10 and ABAQUS-6-11-1) and 'generic'. The 'Jobs' section is further divided into 'By State' (Running, Pending, Done, Exited, Suspended, Active) and 'Job Data' (Remote Consoles). The main content area is titled 'Requirements' and contains several sections: 'Number of processors required to run job' with input fields for 'Minimum number of processors' (4), 'Maximum number of processors', and 'Number of processors to use on each host' (1); 'Resource Requirement string' with a help icon; 'Limits' with 'Maximum run time' (Hour and Minute fields, with '5' in the minute field) and 'Maximum memory size per process' (KB field); 'Additional Job Options' with dropdowns for 'This job is rerunnable' (<Use Default>), 'Application profile name' (<Use Default>), 'Project', 'Reservation ID' (<Use Default>), 'Login Shell' (<Use Default>), 'Submit to this Queue' (scarf), and 'Other bsub options' with a help icon. Below these is a 'Data' section with 'Input file' (Add Local File, Add Server File), 'Output file' (output, Browse...), and 'Error file' (error, Browse...). At the bottom are 'Submit' and 'Revert' buttons.


MPI job submission page – Advanced options

The advanced section of job submission can be expanded to specify extra arguments. For example, selecting the number of job slots/processors required to run the job, run time of the job or how many job slots to use per host. In this particular example 4 processors are being requested, 1 per host.

There will not be any output or error files generated unless specified during the submission process.

In other bsub options you can specify '-x' for exclusive access, if needed.

SCARF Portal User guide

**STFC**

SCARF Portal

scarf165 (Administrator) | Log Out | Help ▾ | Refresh ▾
Feb 10, 2014 15:59:58 +0000

Jobs

Resources

Settings

Reports

▼ Submission Forms

ABAQUS-6-10

ABAQUS-6-11-1

generic

▼ Jobs

▼ By State

Running

Pending

Done

Exited

Suspended

Active

► Job Data

Remote Consoles

Job ID 891288

Job Name mpijob

Job Status Pending

Description -

View Output

Suspend

Resume

Rerun

Kill

Resubmit

Submission Time 2014-02-10 15:59:56

Start Time -

More Details

TailViewUploadDownloadCopy ToMove ToMore Actions ▾

Location: /home/scarf165/mpijob_1392047995965Aosw/

File Name	File Size	File Type	Date Modified
-----------	-----------	-----------	---------------

Job pending status page

SCARF Portal User guide

The screenshot shows the SCARF Portal interface. At the top, there is a header with the STFC logo, the text "SCARF Portal", and user information: "scarf165 (Administrator) | Log Out | Help | Refresh" with a timestamp "Feb 10, 2014 16:00:56 +000".

On the left, there is a sidebar with navigation links: "Jobs", "Resources", "Settings", and "Reports". Under "Jobs", there are sub-links: "Submission Forms" (ABAQUS-6-10, ABAQUS-6-11-1, generic), "By State" (Running, Pending, Done, Exited, Suspended, Active), "Job Data", and "Remote Consoles".

The main content area is titled "Jobs" and contains a table of job submissions. The table has columns: ID, Type, Name, State, Application, Submission Time, End Time, User, and Notification. The job 891288 is highlighted in green and has a state of "Done".

Below the table, there is a section for "Job: mpijob (891288)" with a "Summary" tab. The summary shows:

- Job Name: mpijob
- Submission Time: 2014-02-10 15:59:50
- Job Status: Done
- Start Time: 2014-02-10 15:59:59
- Description: -

There are buttons for "More Details", "Tail", "View", "Upload", "Download", "Copy To", "Move To", and "More Actions". Below these, there is a table of output files:

File Name	File Size	File Type	Date Modified
output	3 KB	File	2014-02-10 16:00:03
error	0 KB	File	2014-02-10 16:00:03

Job status page with output files

Following is the output file from the submitted job.

```
Sender: LSF System <lsfadmin@cn214.scarf.rl.ac.uk>
Subject: Job 891288: <mpijob> Done
```

```
Job <mpijob> was submitted from host <portal.scarf.rl.ac.uk> by user <scarf165> in cluster <sctsc>.
Job was executed on host(s) <1*cn214.scarf.rl.ac.uk>, in queue <scarf>, as user <scarf165> in cluster <sctsc>.
    <1*cn228.scarf.rl.ac.uk>
    <1*cn212.scarf.rl.ac.uk>
    <1*cn238.scarf.rl.ac.uk>
</home/escg/scarf165> was used as the home directory.
```

SCARF Portal User guide

</home/scarf165/mpijob_1392047995965Aosvx> was used as the working directory.

Started at Mon Feb 10 15:59:59 2014

Results reported at Mon Feb 10 16:00:03 2014

Your job looked like:

```
-----  
# LSBATCH: User input
```

```
/opt/platform_mpi/bin/mpirun -lsf -np 4 /home/escg/scarf165/mpitest/mpi_hello_world/mpi_hello_world  
-----
```

Successfully completed.

Resource usage summary:

CPU time : 10.68 sec.

Max Memory : 2 MB

Max Swap : 24 MB

Max Processes : 1

Max Threads : 1

The output (if any) follows:

Hello world from processor cn214.scarf.rl.ac.uk, rank 0 out of 4 processors

Hello world from processor cn228.scarf.rl.ac.uk, rank 1 out of 4 processors

Hello world from processor cn212.scarf.rl.ac.uk, rank 2 out of 4 processors

Hello world from processor cn238.scarf.rl.ac.uk, rank 3 out of 4 processors

PS:

Read file <error> for stderr output of this job.

As the output shows, the job used 4 processors and each of them was on a different system.