



Introduction to CSC Computing Environment

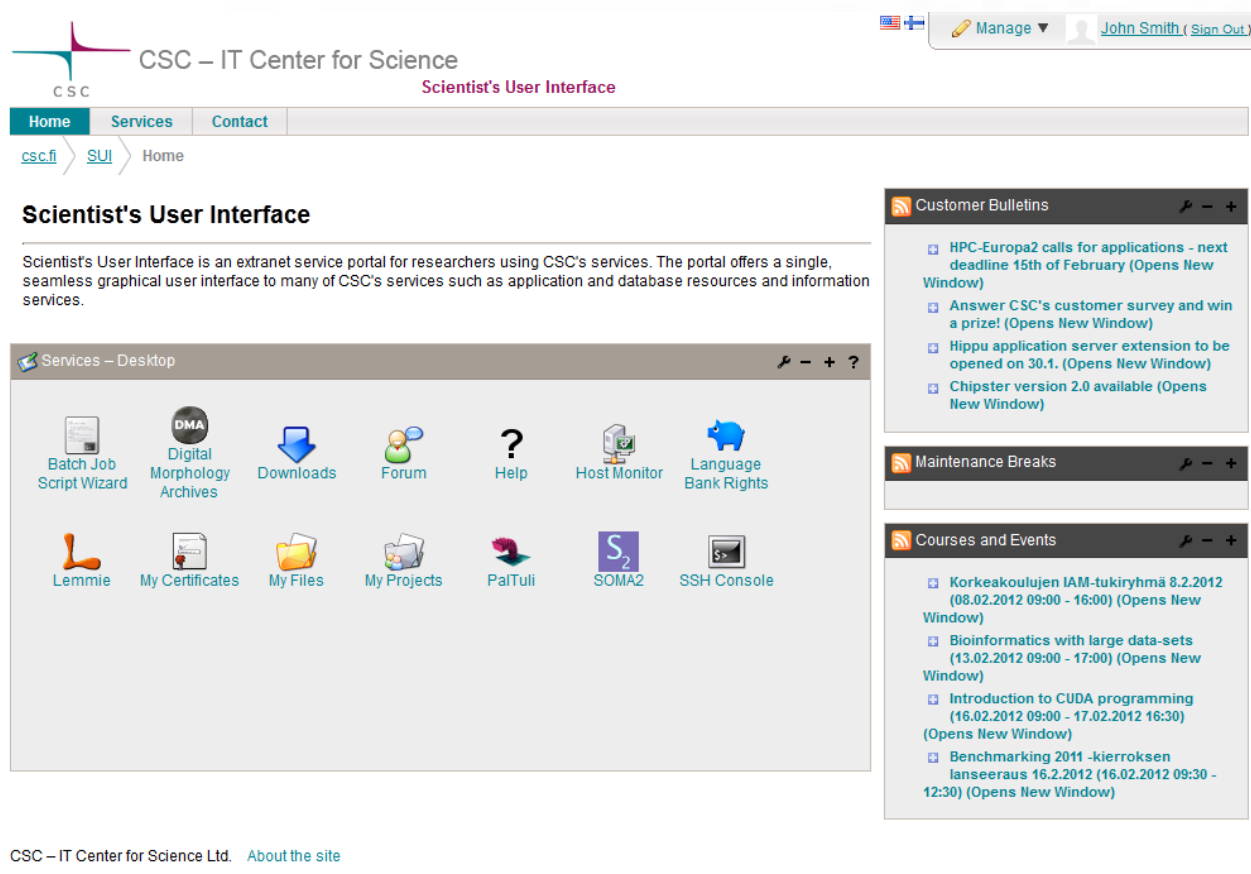
Scientist's User Interface

Web based interaction with CSC's servers
and services

Scientist's User Interface (SUI)

WWW-portal for all CSC users – <https://sui.csc.fi>

- Manage your account
- Access your data
- Download material
- Watch videos
- Monitor hosts and jobs
- Use applications
- Personalize your use
- Participate
- **+ more**



The screenshot displays the CSC – IT Center for Science Scientist's User Interface. The header includes the CSC logo, the title "CSC – IT Center for Science", and the subtitle "Scientist's User Interface". Navigation tabs for "Home", "Services", and "Contact" are visible, with "Home" selected. A breadcrumb trail shows "csc.fi > SUI > Home".

The main content area is titled "Scientist's User Interface" and contains a descriptive paragraph: "Scientist's User Interface is an extranet service portal for researchers using CSC's services. The portal offers a single, seamless graphical user interface to many of CSC's services such as application and database resources and information services."

Below the text is a "Services – Desktop" section featuring a grid of icons for various services: Batch Job Script Wizard, Digital Morphology Archives, Downloads, Forum, Help, Host Monitor, Language Bank Rights, Lemmie, My Certificates, My Files, My Projects, PalTuli, SOMA2, and SSH Console.

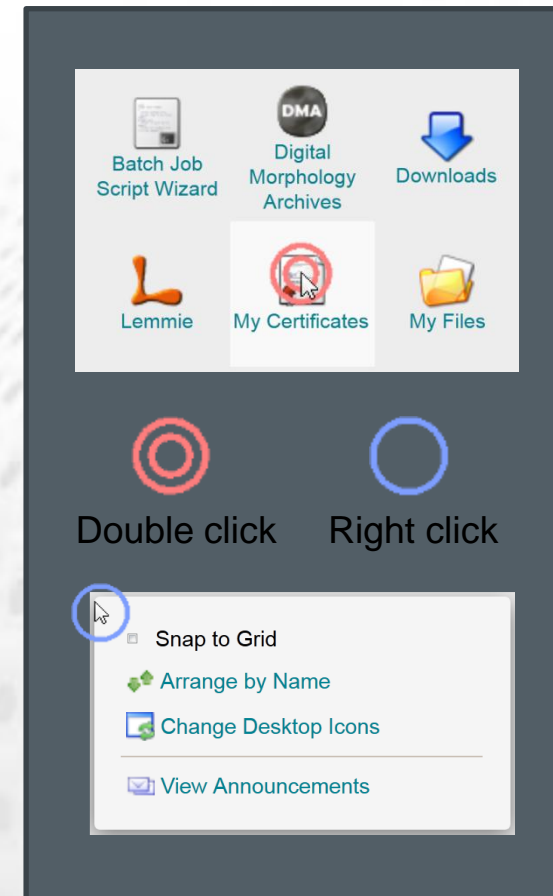
On the right side, there are three panels: "Customer Bulletins" with links to HPC-Europa2 calls, a customer survey, Hippu application server extension, and Chipster version 2.0; "Maintenance Breaks"; and "Courses and Events" with a list of upcoming events including IAM-tukiryhmä 8.2.2012, Bioinformatics with large data-sets, Introduction to CUDA programming, and Benchmarking 2011 -kierroksen lanseeraus.

At the bottom, the footer reads "CSC – IT Center for Science Ltd. About the site".

Scientist's User Interface (SUI)

Easy to use services with rich user experience

- CSC's services integrated under one access point
- Improved user experience – more than just a UNIX shell
- Look & feel like in desktop applications
 - Select, double click, context menus by right click, drag & drop, etc.
- Help is always near – click **?** -icon
 - Help as a separate portal service
 - Help modes of individual applications



Scientist's User Interface (SUI)

Use case – run job via SUI-portal



Generate and store suitable job script with **Batch Job Script Wizard**



Open terminal connection to Vuori with **SSH Console** and submit job



Monitor your job on Vuori with **Host Monitor**



Examine and download results with **My Files**

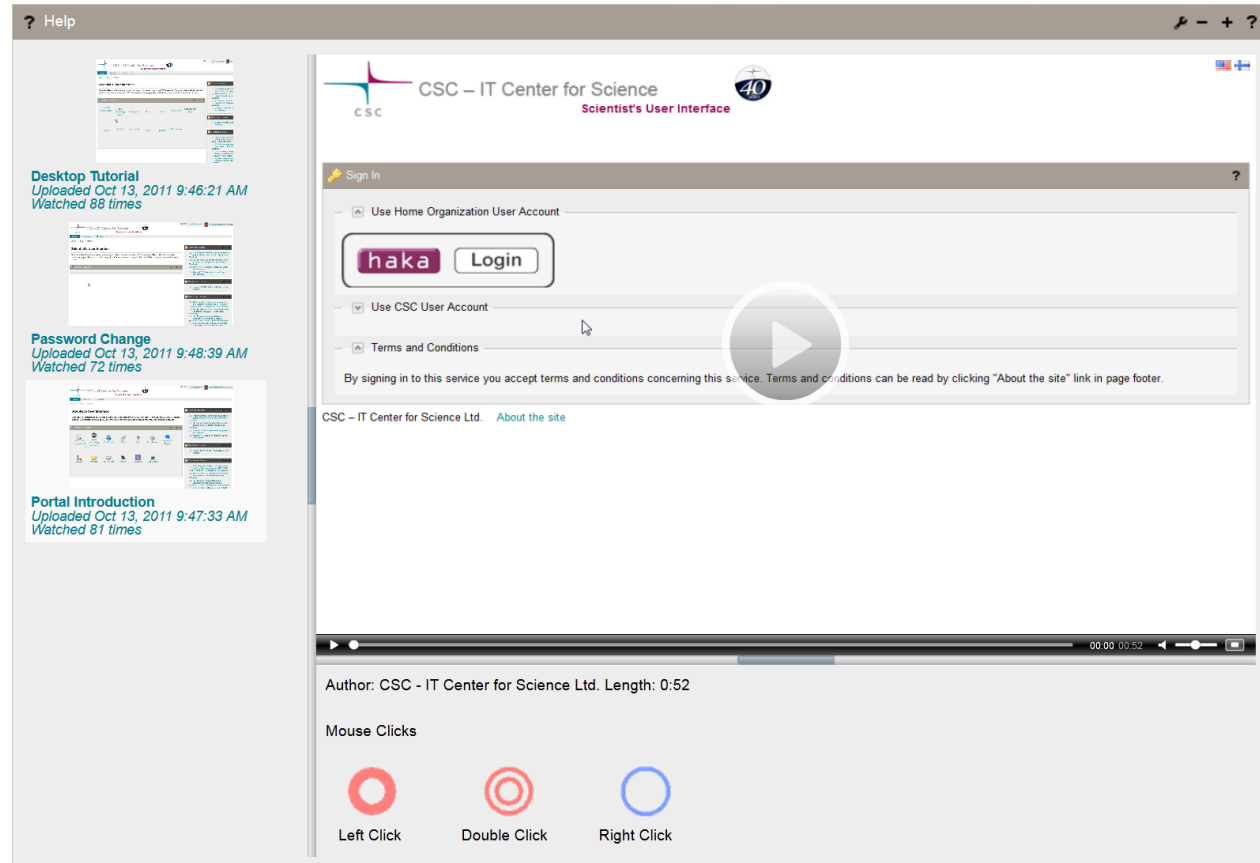


Monitor your project's resource usage with **My Projects**

Scientist's User Interface (SUI)

? Help

- **Watch** SUI portal's tutorial videos
- **Learn** how to use SUI's services



The screenshot shows a web browser window displaying the SUI portal's help page. The page has a header with the CSC logo and the text "CSC – IT Center for Science" and "Scientist's User Interface". Below the header is a "Sign In" section with a "haka" button and a "Login" button. A large play button is overlaid on the sign-in section. Below the sign-in section is a "Terms and Conditions" section. At the bottom of the page, there is a video player with a progress bar and a timestamp of 00:00:00:52. The video player is titled "Author: CSC - IT Center for Science Ltd. Length: 0:52". Below the video player, there are three circular icons labeled "Left Click", "Double Click", and "Right Click".

? Help

CSC – IT Center for Science
Scientist's User Interface

Sign In

Use Home Organization User Account

haka Login

Use CSC User Account

Terms and Conditions

By signing in to this service you accept terms and conditions concerning this service. Terms and conditions can be read by clicking "About the site" link in page footer.

CSC – IT Center for Science Ltd. [About the site](#)

00:00 00:52

Author: CSC - IT Center for Science Ltd. Length: 0:52

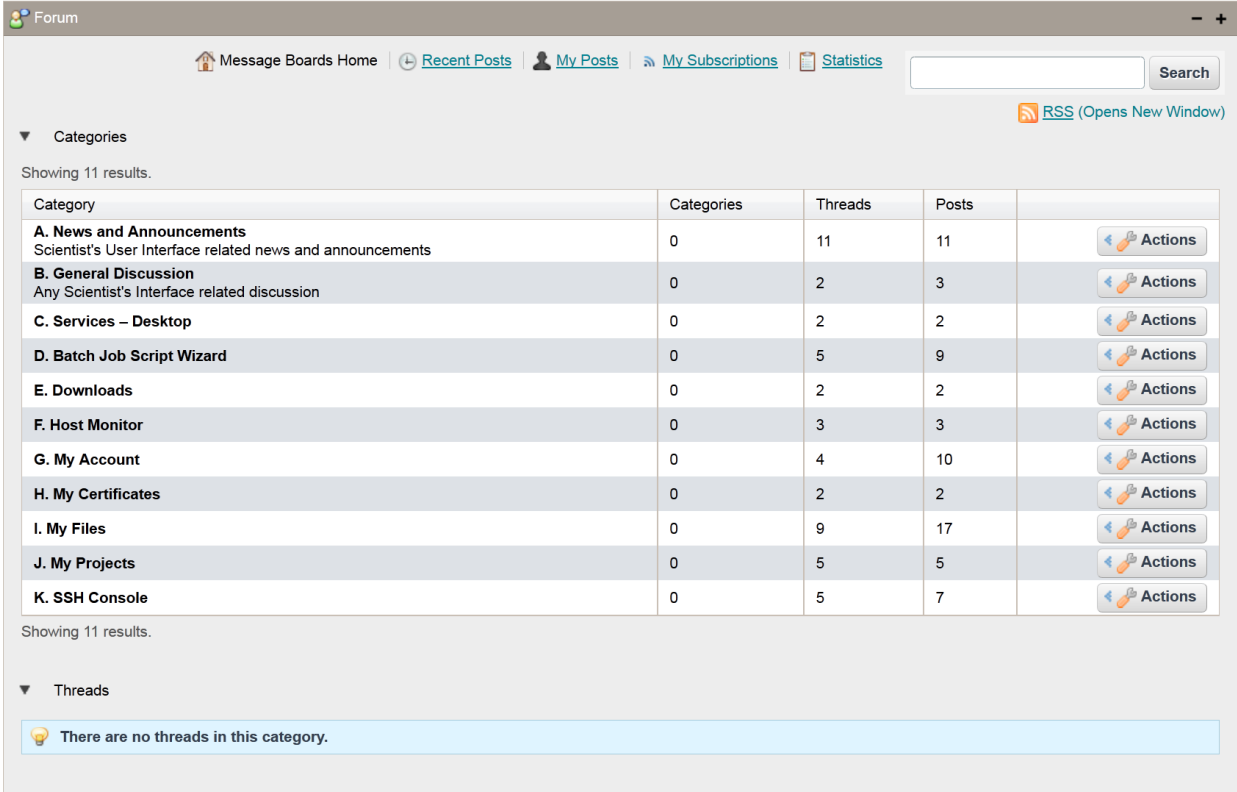
Mouse Clicks

Left Click Double Click Right Click

Scientist's User Interface (SUI)












Forum

- **Participate** in discussion on forum
- Quick way to find information of SUI, ask questions or **give feedback** to developers
- **Present ideas** for new services



The screenshot shows the 'Forum' page of the Scientist's User Interface (SUI). The page has a navigation bar with links: Message Boards Home, Recent Posts, My Posts, My Subscriptions, and Statistics. There is a search bar and an RSS feed link (RSS (Opens New Window)).

Below the navigation bar, there is a section for 'Categories' showing 11 results. The results are displayed in a table with columns: Category, Categories, Threads, Posts, and Actions.

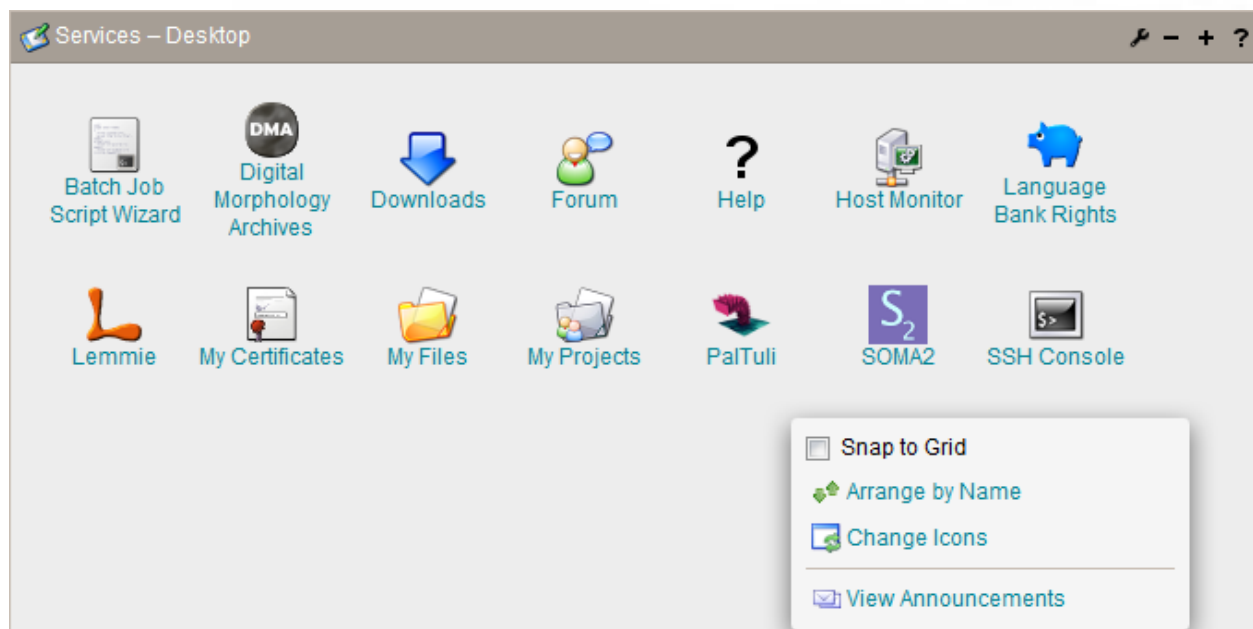
Category	Categories	Threads	Posts	Actions
A. News and Announcements Scientist's User Interface related news and announcements	0	11	11	
B. General Discussion Any Scientist's Interface related discussion	0	2	3	
C. Services – Desktop	0	2	2	
D. Batch Job Script Wizard	0	5	9	
E. Downloads	0	2	2	
F. Host Monitor	0	3	3	
G. My Account	0	4	10	
H. My Certificates	0	2	2	
I. My Files	0	9	17	
J. My Projects	0	5	5	
K. SSH Console	0	5	7	

Below the table, there is a section for 'Threads' showing 11 results. A message box indicates: 'There are no threads in this category.'

Scientist's User Interface (SUI)

Services - Desktop

- **Personalize** your desktop by selecting your favorite services
- Sort/arrange by using drag&drop
- See announcements



Scientist's User Interface (SUI)

My Account

- **Maintain** your account information
- **Change password** for CSC environment
- **Define** your personal settings

My Account

?

John Smith

«Back

Details

Username

smith

CSC Uid

0000

Email Address

john.smith@unknown.eu

First Name


John


Last Name


Smith

Job Title

Regular User



 [Change](#)

 [Delete](#)

User Information

Details

CSC Password

Organizations

Communities

Roles

Identification

Addresses

Phone Numbers

Websites

Miscellaneous

Announcements

Display Settings

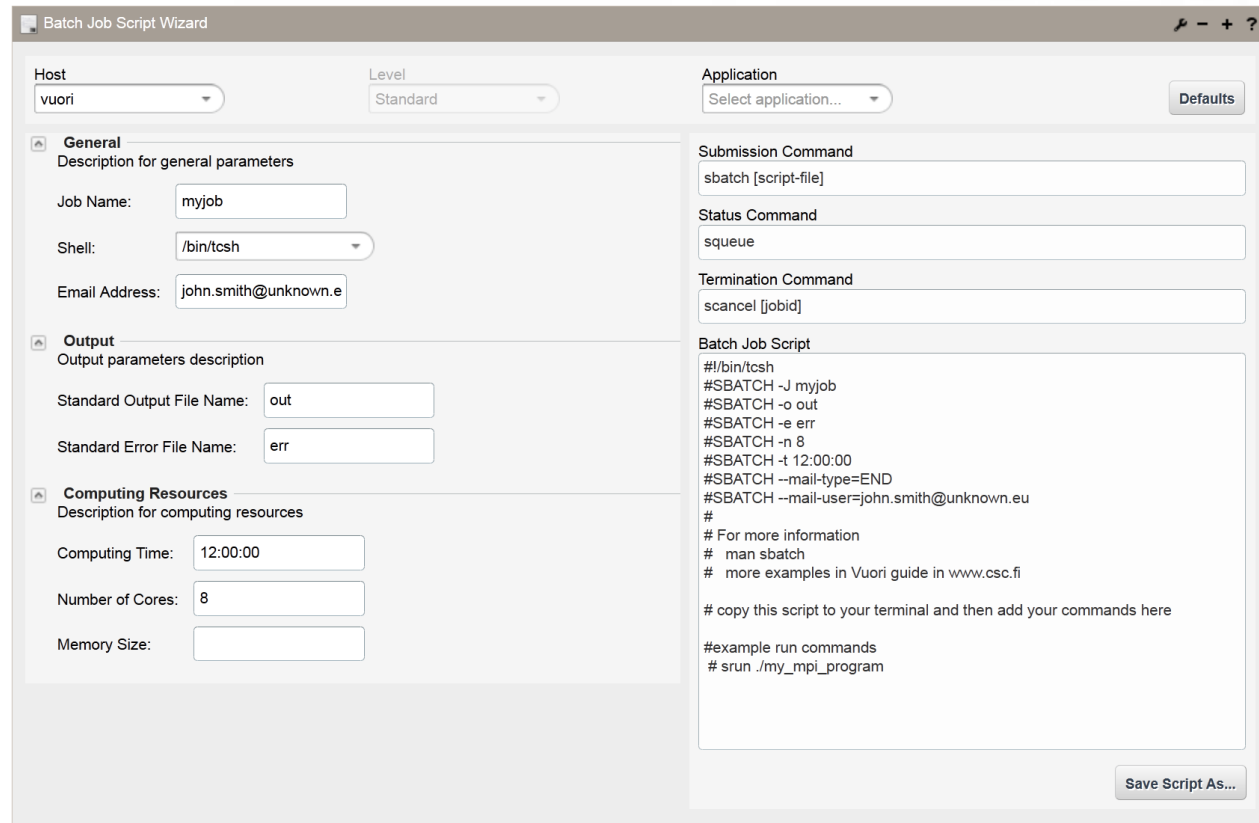
Save

Cancel

Scientist's User Interface (SUI)

Batch Job Script Wizard

- **Create job scripts**
with easy to use forms
- **Save scripts** locally or
in CSC \$HOME
- Instructions of how to
submit and monitor



Batch Job Script Wizard

Host: vuori Level: Standard Application: Select application... Defaults

General
Description for general parameters

Job Name: myjob

Shell: /bin/tcsh

Email Address: john.smith@unknown.e

Output
Output parameters description

Standard Output File Name: out

Standard Error File Name: err

Computing Resources
Description for computing resources

Computing Time: 12:00:00

Number of Cores: 8

Memory Size:

Submission Command
sbatch [script-file]

Status Command
squeue

Termination Command
scancel [jobid]

Batch Job Script

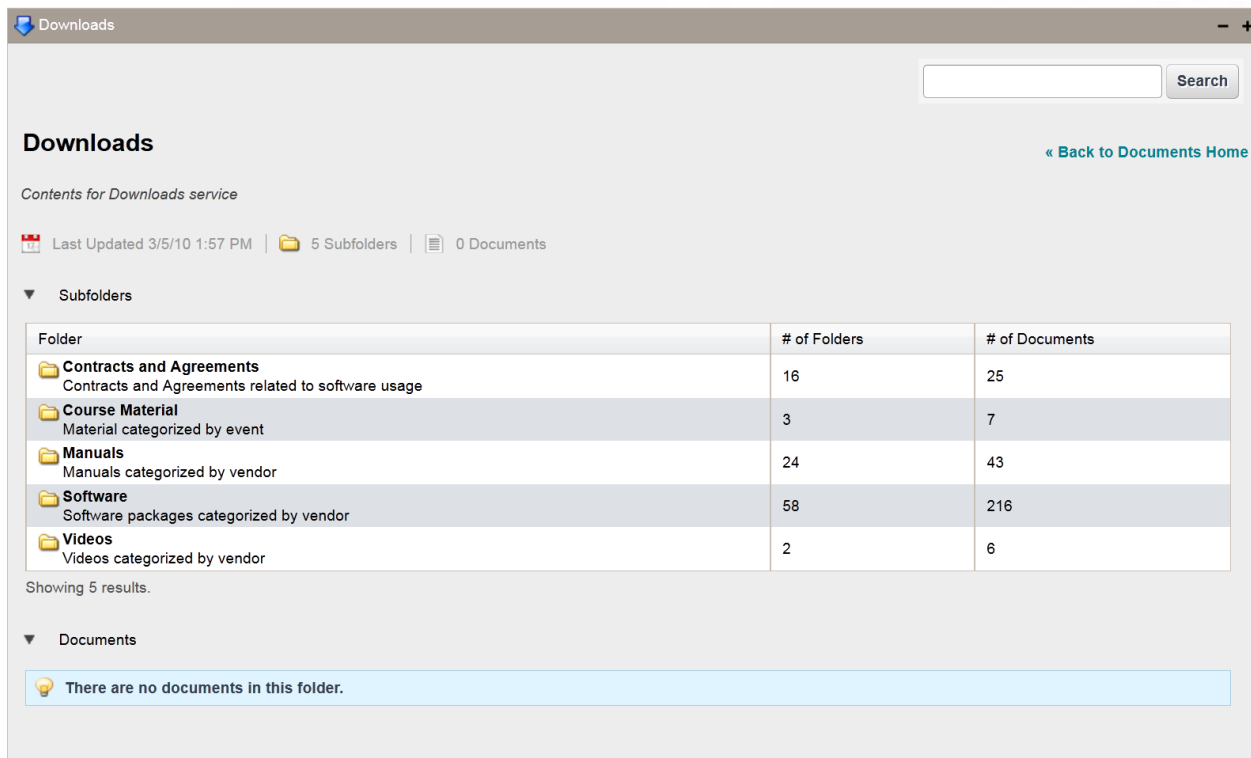
```
#!/bin/tcsh
#SBATCH -J myjob
#SBATCH -o out
#SBATCH -e err
#SBATCH -n 8
#SBATCH -t 12:00:00
#SBATCH --mail-type=END
#SBATCH --mail-user=john.smith@unknown.eu
#
# For more information
# man sbatch
# more examples in Vuori guide in www.csc.fi
#
# copy this script to your terminal and then add your commands here
#
#example run commands
# srun ./my_mpi_program
```

Save Script As...

Scientist's User Interface (SUI)

Downloads

- **Access material** provided to you by CSC
- **Software installation** packages, manuals, videos etc.



Downloads

Contents for Downloads service

Last Updated 3/5/10 1:57 PM | 5 Subfolders | 0 Documents

Subfolders

Folder	# of Folders	# of Documents
Contracts and Agreements Contracts and Agreements related to software usage	16	25
Course Material Material categorized by event	3	7
Manuals Manuals categorized by vendor	24	43
Software Software packages categorized by vendor	58	216
Videos Videos categorized by vendor	2	6

Showing 5 results.

Documents

There are no documents in this folder.

Scientist's User Interface (SUI)



Host Monitor

- View statuses and details of CSC's computing servers and batch systems

Host Name	CPU Load	CPU Usage
hippu	31%	40 / 128
louhi	93%	10092 / 10869
murska	59%	1186 / 1996
vuori	51%	1641 / 3228
Average CPU Load	58%	

Updated Feb 7, 2012 10:48:01 AM

- Monitor jobs in single view

- Control your own jobs

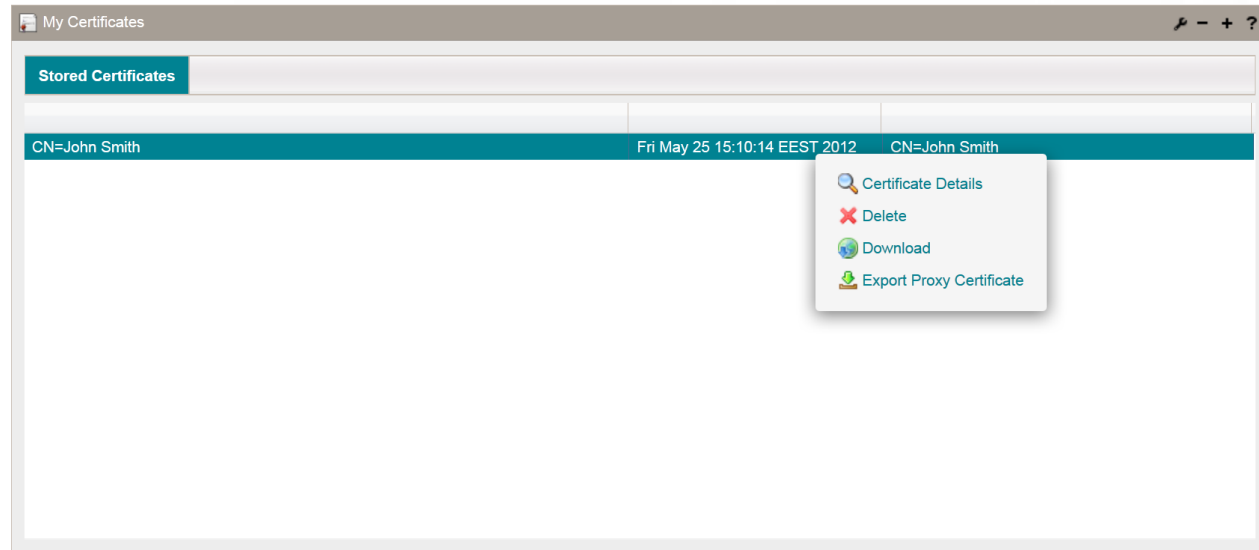
Host Name	Job ID	Username	Job Name	State	Queue	Computation Node
vuori	1316916	apsarin	NFBC66_c	RUNNING	serial	n115
vuori	1316905	apsarin	NFBC66_c	RUNNING	serial	n92
vuori	1316906	apsarin	NFBC66_c	RUNNING	serial	n92
vuori	1316907	apsarin	NFBC66_c	RUNNING	serial	n93
vuori	1316908	apsarin	NFBC66_c	RUNNING	serial	n93
vuori	1316896	apsarin	NFBC66_c	RUNNING	serial	n18
vuori	1316898	apsarin	NFBC66_c	RUNNING	serial	n84
vuori	1316894	apsarin	NFBC66_c	RUNNING	serial	n30
vuori	1316895	apsarin	NFBC66_c	RUNNING	serial	n18
vuori	1315356	apsarin	COROGENE	RUNNING	serial	n133
louhi	981450.sdb	asf	snpc	Q	tiny-e	--
louhi	981653.sdb	asf	copper	Q	tiny-e	--
vuori	1316887	astrom	glas	RUNNING	parallel	n24
vuori	1316865	astrom	seb	RUNNING	parallel	n[25,28-30]
vuori	1316862	astrom	cell	RUNNING	parallel	n[53,63]
murska	855781	astrom	fret	RUN	parallel	7*lsfhost.localdomain
murska	855539	avaltone	north_job[1]	RUN	serial	lsfhost.localdomain
murska	855539	avaltone	north_job[2]	RUN	serial	lsfhost.localdomain
murska	855539	avaltone	north_job[3]	RUN	serial	lsfhost.localdomain
murska	855539	avaltone	north_job[4]	RUN	serial	lsfhost.localdomain
Total Number of Jobs	735	3 (jsmith)	Number of Pending Jobs	248 (34%)		

Scientist's User Interface (SUI)



My Certificates

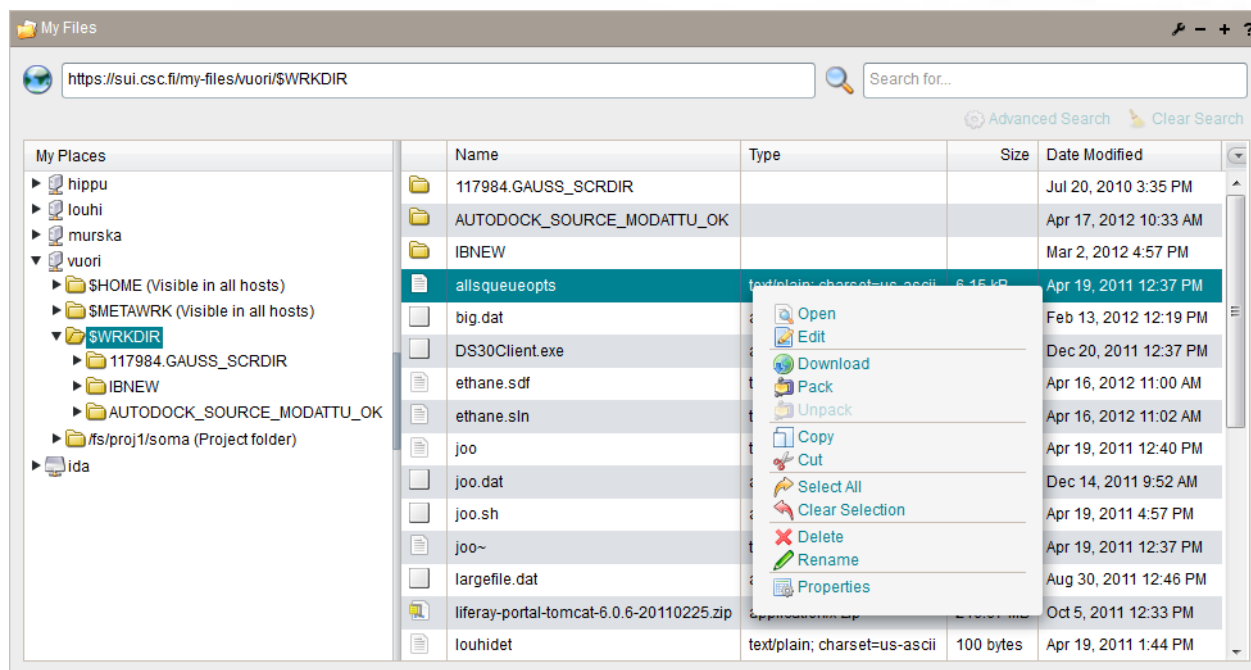
- **Process** your X509 digital certificates
- Format conversions, export proxies, save locally or to your CSC \$HOME
- **Setup grid usage** in CSC's computers



Scientist's User Interface (SUI)

My Files

- Access your data in CSC's storage services in single view (computing servers and Ida)
- Transfer files
- Basic folder and file operations available



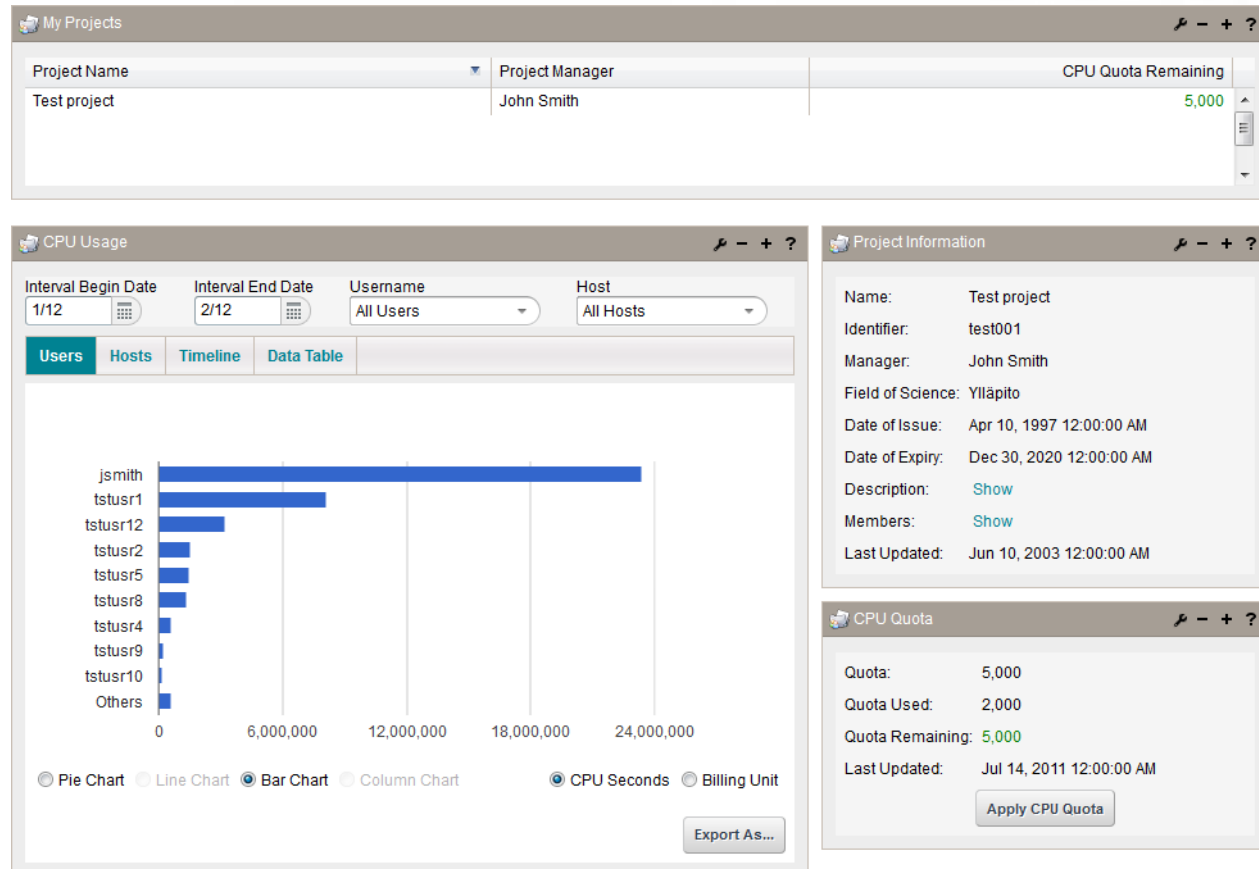
Scientist's User Interface (SUI)

My Projects

- View information and resource usage of your CSC projects

- Apply resources for your CSC customer project

- Resource usage presented by different kind of exportable graphs and data table



Scientist's User Interface (SUI)



SSH Console



Connect to CSC's computing servers



UTF-8 character translation support

SSH Console Application

This page provides access to SSH console Java applet application. Application will ask for authentication method to use.

Please note that to be able to use this service, Java web browser must be enabled.

Character Set: ☒ Latin-1 ☐ UTF-8

Username:

Remote Host:

[Launch SSH Console](#)

CSC – IT Center for Science Ltd. [About the site](#)

SSH - Mozilla Firefox

csc.fi https://sui.csc.fi/sshconsole/view.jsp

File Edit View Tools Window Help

```

top - 12:22:02 up 69 days, 3:37, 43 users, load average: 31.72, 31.43, 31.46
Tasks: 962 total, 16 running, 911 sleeping, 1 stopped, 34 zombie
Cpu(s): 63.24us, 0.34sy, 25.83ni, 12.01id, 0.24wa, 0.01hi, 0.64st, 0.01at
Mem: 528647604k total, 526200640k used, 2446964k free, 567364k buffers
Swap: 102398300k total, 6216080k used, 40237620k free, 288039580k cached

  PID USER      PR  NI  VIRT  RES  SHR  S %CPU  %MEM    TIME+  COMMAND
15441 runeberg 25   0 26.1g 20g 3092 R 1162.5 4.2 17847:32 1911.exe
23904 yleino     25   0 218m 205m 2080 R 100.0 0.0 112:28.12 pgf902
3630 root      25   0 3032k 29m 480 R 100.0 0.0 1:15.56 aide
29247 riehtone 39  15 11.9g 8.5g 612 R 99.0 1.7 85196:55 coalescent
29394 root     15   0 70464 2328 1224 S 97.4 0.0 1559:32 cvrwd
29233 riehtone 39  15 11.9g 8.5g 588 R 95.4 1.7 85221:03 coalescent
29163 riehtone 39  15 11.9g 8.5g 588 R 94.8 1.7 85242:16 coalescent
10225 pairadb 25   0 25.1g 24g 656 R 94.1 4.8 10001:33 cd-hit
19830 blozer   18   0 74032 5420 968 R 92.2 0.0 16937:28 dmx1st
29259 riehtone 39  15 11.9g 8.5g 588 R 87.3 1.7 85249:29 coalescent
5343 passerim 18   0 43084 8304 1996 R 84.6 0.0 0:51.40 python
29242 riehtone 39  15 11.9g 8.5g 612 R 82.0 1.7 85219:35 coalescent
27048 riehtone 39  15 11.9g 8.5g 588 R 81.4 1.7 85235:21 coalescent
29207 riehtone 39  15 11.9g 8.5g 612 R 79.4 1.7 85235:51 coalescent
30435 riehtone 39  15 12.0g 8.6g 588 R 79.4 1.7 85261:44 coalescent
24251 root      16   0 540m 42m 32m S 73.5 0.0 2:10:04.37 clBackup
30479 riehtone 39  15 11.9g 8.5g 588 R 73.2 1.7 85248:02 coalescent
26250 root      16   0 541m 43m 32m S 65.0 0.0 258:53.68 clBackup
30449 riehtone 39  15 12.0g 8.5g 612 R 55.2 1.7 85232:56 coalescent
14911 kkmattil 17   0 40696 6112 1708 S 16.0 0.0 2:02.75 python
8879 root      16   0 0 0 0 S 8.2 0.0 7:08.32 pdf1ush
12978 pemakkon 15   0 95728 3972 1456 S 5.6 0.0 1:34.82 sshd
6939 pemakkon 15   0 466m 67m 30m S 4.9 0.0 2:19:29 xviev.exe
1019 pemakkon 16   0 16412 1952 912 S 2.3 0.0 0:04.02 top
1324 aubroke   16   0 16412 2336 1284 S 2.0 0.0 0:52.67 top
4875 takimunn 16   0 16412 1964 916 S 1.6 0.0 0:00.92 top
19388 root      15   0 0 0 0 S 1.0 0.0 232:19.18 prtped
4815 root      15   0 0 0 0 S 0.7 0.0 5:17.72 idim_cb_03
12366 puttonen 15   0 247m 23m 11m S 0.7 0.0 0:22:40 emacs
22779 root      10 -5 0 0 0 S 0.7 0.0 134:07.52 tpciod/25
120 root      10 -5 0 0 0 S 0.3 0.0 0:14.05 events/22
463 root      10 0 0 0 0 S 0.3 0.0 1:17.17 idim_h1_16
6882 yleino     15   0 125m 6688 1764 S 0.3 0.0 64:46:29 scripted
9538 root      15   0 0 0 0 S 0.3 0.0 4:50:52 idim_cb_04
9766 yleino     15   0 255m 27m 6348 S 0.3 0.0 1:40:69 emacs
9998 root      15   0 165m 628 596 S 0.3 0.0 15:38.68 upatmmd1
10929 root      15   0 0 0 0 S 0.3 0.0 5:15.05 idim_cb_02
  
```

GSI-SSHTerm [hipput1] jakimunn [unknown] [Connected]

Scientist's User Interface (SUI)

Science Field Specific Application Environments



Language Bank Rights

- http://www.csc.fi/english/research/sciences/linguistics/index_html



Lemmie – Corpus Query Interface

- <http://www.csc.fi/english/research/software/www-lemmie>



Digital Morphology Archives – DMA

- <http://www.csc.fi/english/research/software/dma>

Scientist's User Interface (SUI)



Science Field Specific Application Environments



SOMA2 – Molecular Modeling Environment

- <http://www.csc.fi/soma>



PaITuli – Geospatial Data Service

- <http://www.csc.fi/paituli>