



NCAS

Unified Model Introduction

Part 6: Finale

University of Reading, 18-20 March 2015

- Through NCAS-CMS (NERC Centre for Atmospheric Science – Computational Modelling Services):
<http://cms.ncas.ac.uk>
- Modelling helpdesk:
<http://cms.ncas.ac.uk/wiki/CmsHelpdesk>
- Email contact:
ncas-umsupport@lists.reading.ac.uk
- UM modelling support team:
 - Jeff Cole, Rosalyn Hatcher, Grenville Lister, Willie McGinty, Annette Osprey, Simon Wilson (50%) Reading
- UKCA modelling support:
 - Luke Abraham (Cambridge)

Machines and facilities:

- Computing time on Archer.
- Support for the UM on national HPC facilities (e.g HECToR, Archer).
- A common platform (puma) for the UMUI database, code repositories, and UM submission.
- Access to the Met Office/NERC collaboration HPC service (MONSooN) via puma.
- Limited support for the UM on local computing facilities (e.g. Polaris, HPC Wales).

Core activities:

- Training days and user meetings
- Documentation and information services
- Set of UM “standard jobs”

Also:

- Development and support for visualisation and analysis tools (xconv, xancil, cf-python, cfplot).
- Support for weather, climate and composition with networks of excellence using the UM.
- Developments in partnership with UKMO through collaborative projects:
 - For example: UKHiGEM, CASCADE, CLIMIP, High resolution modelling, UKESM, SWAMMA.



1. On ARCHER please make your /home and /work directories readable by the CMS team so that we can help with any queries.

```
chmod -R g+rX /home/n02/n02/<username>
```

```
chmod -R g+rX /work/n02/n02/<username>
```
2. Always search the helpdesk before raising a query. You may find that your query has already been answered.
3. When contacting the CMS Helpdesk please make sure you supply the following information to help us answer your query more quickly.
 - Cut and paste any error messages
 - The job id of the UM job (e.g. xbcde)
 - The name of the UM output file ending .comp.leave or .leave

Archer helpdesk:

- <https://www.archer.ac.uk/safe/>

MONSooN helpdesk:

- servicedesk@metoffice.gov.uk
(Mention MONSooN in the email header)
- monsoon@metoffice.gov.uk

Jasmin CEDA helpdesk:

- support@ceda.ac.uk

Met Office newsgroups (for general UM advice or scientific queries):

- <http://collab.metoffice.gov.uk/twiki/bin/view/Newsgroups/WebHome>

Who to contact

Issue	Archer	MONSooN
New account	CMS	MONsooN
Can't ssh in	Archer	MONSooN
Over quota	CMS	MONSooN
Can't submit UM jobs	CMS	CMS
UM job crashes	CMS	CMS
Jobs queuing for a long time	CMS/Archer	MONSooN
Interactive sessions slow / Shell commands don't work	Archer	MONSooN

1. Register for an Archer account (if you haven't done so already).
2. Set up ssh-agent to allow connection between your puma and Archer accounts:
https://puma.nerc.ac.uk/trac/UM_TUTORIAL/wiki/sshAgent
3. Finish working through the tutorial exercises
4. Make sure to complete the FCM tutorial:
https://puma.nerc.ac.uk/trac/UM_TUTORIAL

5. Copy a UM output file to your local system or Jasmin. Produce a plot of your favourite field using an available graphics package.
6. Browse the UMUI database to find a job that is similar to the one you want to run. Look at its options and settings.
7. Read the UM user guide:
<http://cms.ncas.ac.uk/wiki/Docs/MetOfficeDocs>
8. Look at the Fortran code in the UM source code browser:
<http://cms.ncas.ac.uk/wiki/UM/CodeBrowsers>