



NCAS Unified Model Introduction

Part 5: Rose and shared repositories

University of Reading, 18-20 March 2015

- Rose is a replacement for the UMUI from version 9.0 onwards.
 - “Jobs” are replaced by “suites”
 - Suites are under version control
 - New tools for viewing, editing and controlling suites
- Cylc will control job submission and scheduling.
 - This will simplify complex workflows and cyclical suites.

puma - rosie go (on exvmsrose.monsoon-metoffice.co.uk)

File Edit View History Help

View all revisions

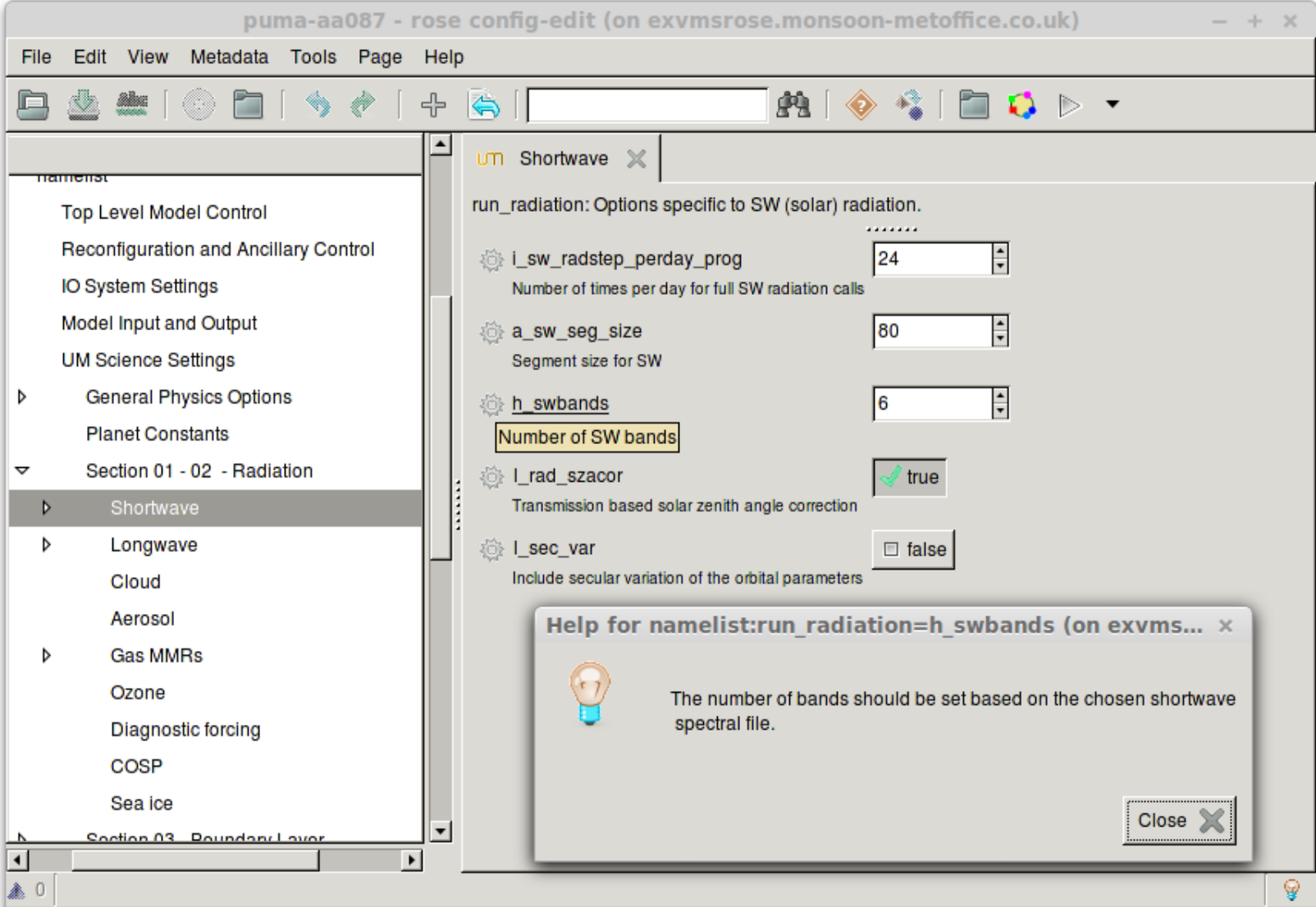
query?q=and+owner+eq+ros

and owner eq ros

Clear filters Add filter Query

local	branch	idx	owner	revision	title
	trunk	puma-aa087	ros	219	Copy of puma-aa073/trunk@192: cp u-aa000: Simple N48 Endgame GA6 Standard Job (build,recon,atmos).
	trunk	puma-aa077	ros	199	For Julia: Copy of puma-aa075/trunk@198: cp mi-ad191: GA6.0 N96 UM9.2 standard job (1988 - 2008)
	trunk	puma-aa075	ros	198	cp mi-ad191: GA6.0 N96 UM9.2 standard job (1988 - 2008)
	trunk	puma-aa073	ros	192	Copy of puma-aa046/trunk@126: cp u-aa000: Simple N48 Endgame GA6 Standard Job (build,recon,atmos).
	trunk	puma-aa070	ros	187	Copy of puma-aa007/trunk@55: Copy of mi-ac429: [MONSooN] GA6.0 N96 UM9.1 standard job (1988 - 2008)
	trunk	puma-aa062	ros	166	Copy of puma-aa046/trunk@126: cp u-aa000: N48 EndGame GA6.0 - Prebuild setup
	trunk	puma-aa046	ros	126	cp u-aa000: Simple N48 Endgame GA6 Standard Job (build,recon,atmos). Platform: Met Office IBM Power 7
	trunk	puma-aa013	ros	43	UM 9.2 "Jagged Jetstream" Simple N48 Endgame GA6 Standard Job
	trunk	puma-aa001	ros	140	cp mi-ab981: Standard N48L70 ENDGame; GA5.0
	test2	puma-aa001	ros	141	cp mi-ab981: Standard N48L70 ENDGame; GA5.0
	test	puma-aa001	ros	139	cp mi-ab981: Standard N48L70 ENDGame; GA5.0
	trunk	puma-aa000	ros	7	Standard UM 9.1 Job

puma 12 records found at 2015-03-13T17:36:45Z



The screenshot shows the Rose suite editor window titled "puma-aa087 - rose config-edit (on exvmsrose.monsoon-metoffice.co.uk)". The interface includes a menu bar (File, Edit, View, Metadata, Tools, Page, Help) and a toolbar with various icons. On the left, a tree view shows the configuration structure, with "Section 01 - 02 - Radiation" expanded to show "Shortwave". The main panel displays the "Shortwave" configuration options:

- run_radiation:** Options specific to SW (solar) radiation.
- i_sw_radstep_perday_prog:** 24 (Number of times per day for full SW radiation calls)
- a_sw_seg_size:** 80 (Segment size for SW)
- h_swbands:** 6 (Number of SW bands)
- l_rad_szacor:** true (Transmission based solar zenith angle correction)
- l_sec_var:** false (Include secular variation of the orbital parameters)

A help dialog box is open over the "h_swbands" option, titled "Help for namelist:run_radiation=h_swbands (on exvms...". It contains a lightbulb icon and the text: "The number of bands should be set based on the chosen shortwave spectral file." A "Close" button is visible in the bottom right of the dialog.

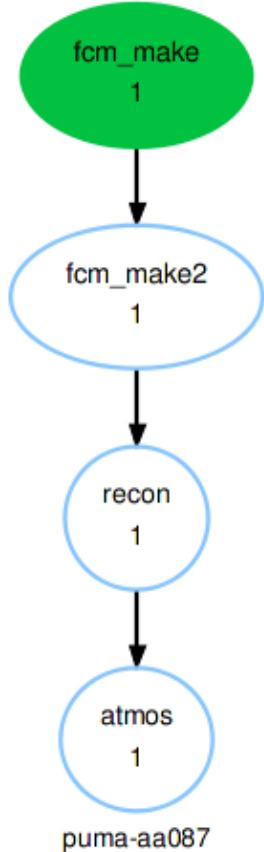
puma-aa087 - exvmscylc - gcylc (on exvmsrose.monsoon-metoffice.co.uk)

File View Control Suite Help

View 1: ■ running ■ failed... + - 🔍

View 2: ● ● ● 🔍 🔍 🔍 🔍

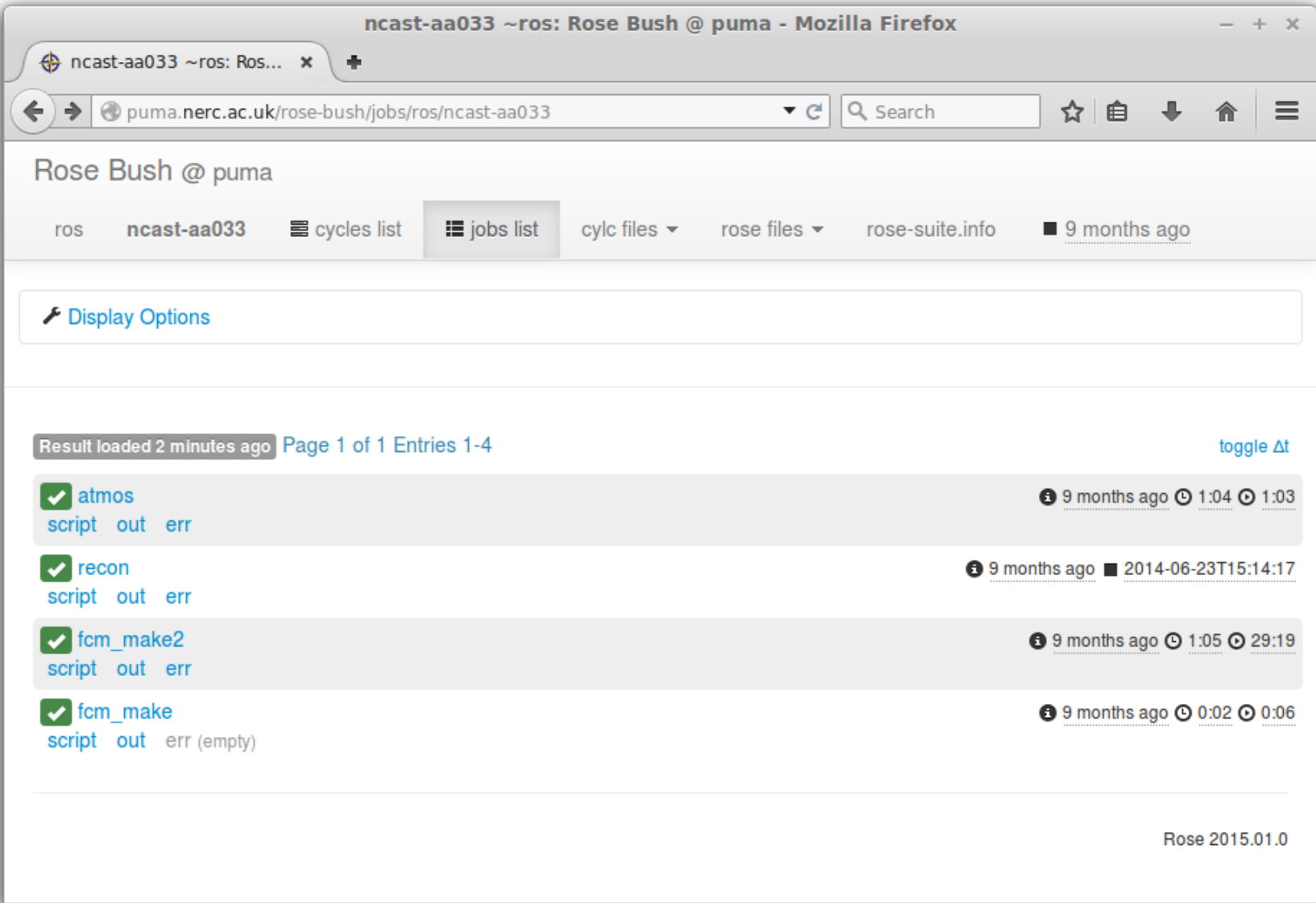
task	state	host	job system	job ID	T-submit	T-start	T-finish
1	running						
■ fcm_make	running	exvmsrose.at		519	17:59:34Z	17:59:35Z	*
■ fcm_make2	waiting	*	*	*	*	*	*
■ recon	waiting	*	*	*	*	*	*
■ atmos	waiting	*	*	*	*	*	*



waiting held queued ready submitted submit-failed
 submit-retry running succeeded failed retrying filter

running to 1 ■ live 2015-03-13T17:59:36Z

Rose suite log viewer



The screenshot shows a web browser window titled "ncast-aa033 ~ros: Rose Bush @ puma - Mozilla Firefox". The address bar shows the URL "puma.nerc.ac.uk/rose-bush/jobs/ros/ncast-aa033". The page content includes a navigation menu with "ros", "ncast-aa033", "cycles list", "jobs list", "cylc files", "rose files", "rose-suite.info", and "9 months ago". A "Display Options" button is visible. The main content area shows a list of job entries with status indicators, names, and timestamps.

ncast-aa033 ~ros: Rose Bush @ puma - Mozilla Firefox

ncast-aa033 ~ros: Ros... x

puma.nerc.ac.uk/rose-bush/jobs/ros/ncast-aa033

Rose Bush @ puma

ros ncast-aa033 cycles list jobs list cylc files rose files rose-suite.info 9 months ago

Display Options

Result loaded 2 minutes ago Page 1 of 1 Entries 1-4 toggle Δ

<input checked="" type="checkbox"/> atmos script out err	i 9 months ago ⌚ 1:04 ⌚ 1:03
<input checked="" type="checkbox"/> recon script out err	i 9 months ago ■ 2014-06-23T15:14:17
<input checked="" type="checkbox"/> fcm_make2 script out err	i 9 months ago ⌚ 1:05 ⌚ 29:19
<input checked="" type="checkbox"/> fcm_make script out err (empty)	i 9 months ago ⌚ 0:02 ⌚ 0:06

Rose 2015.01.0

Contact the helpdesk if you want to run with Rose.

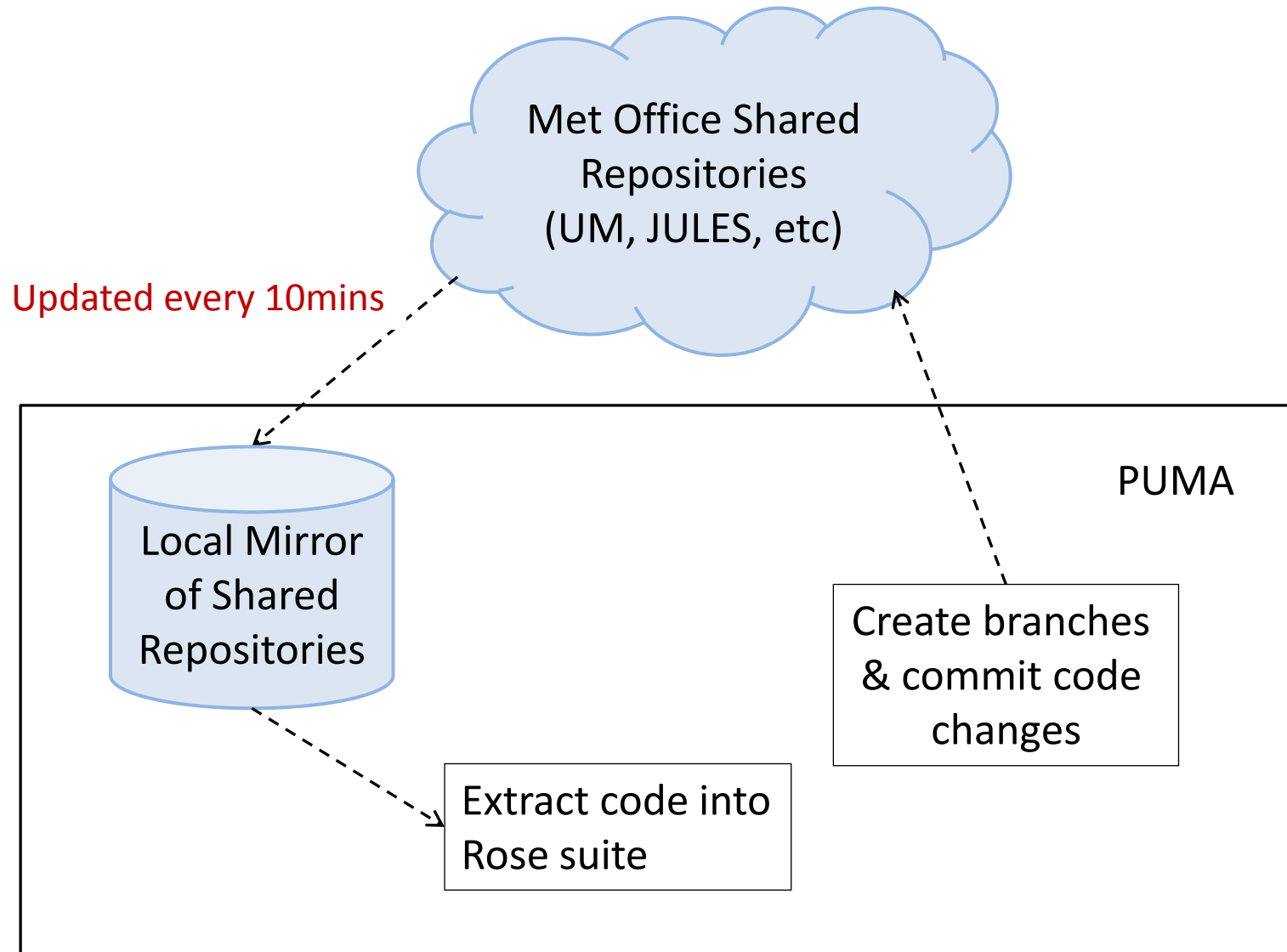
See also:

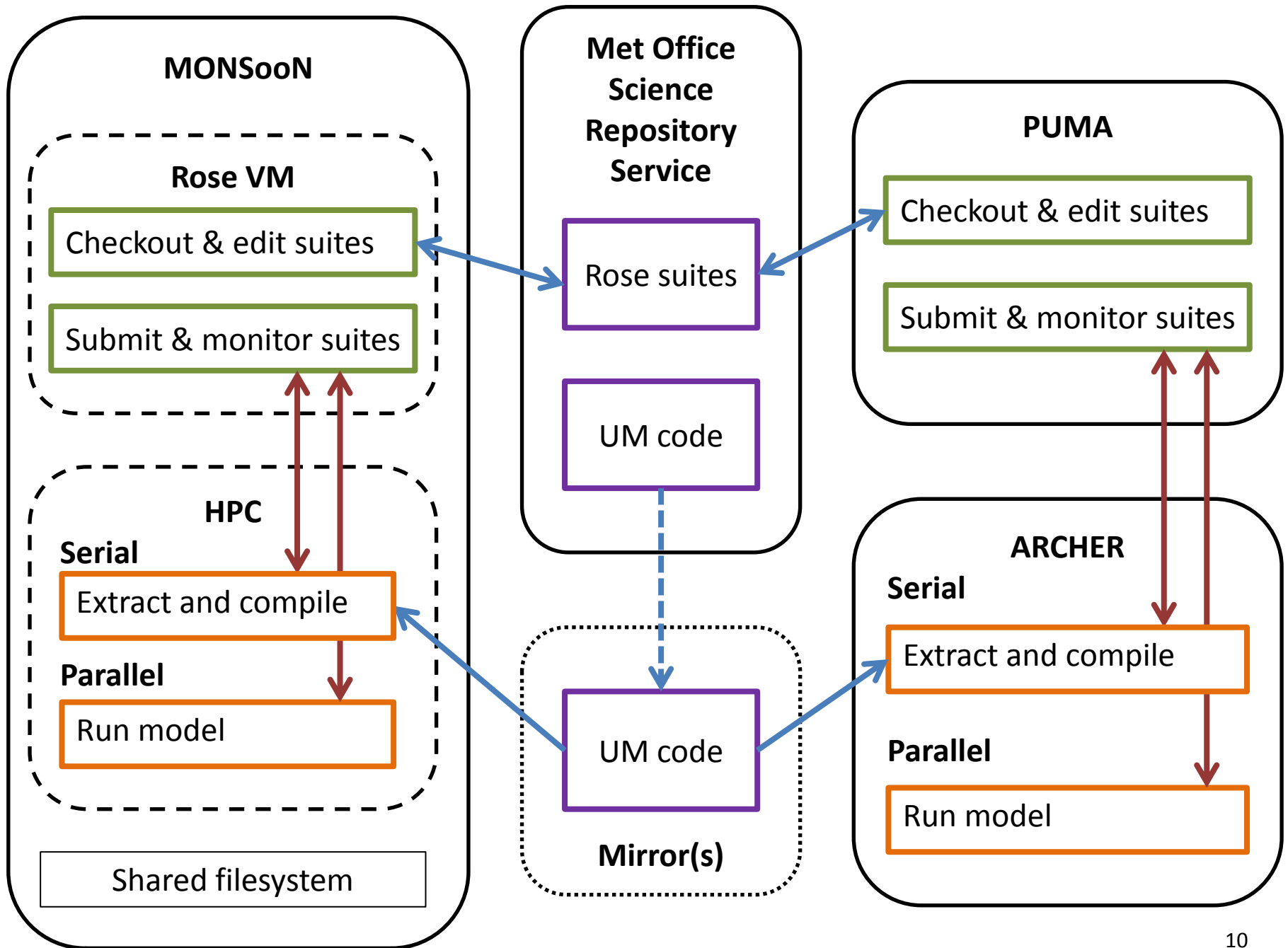
- Getting started with Rose on MONSooN:
<http://collab.metoffice.gov.uk/twiki/bin/view/Support/MONSooNRose>
- NCAS Rose hints and tips (including a link to the UM Rose tutorial):
<http://cms.ncas.ac.uk/wiki/RoseCylc>
- Rose documentation (with tutorial exercises):
<http://metomi.github.io/rose/doc/rose.html>
- Cylc documentation (including example suites):
<http://cylc.github.io/cylc/html/single/cug-html.html>



- From vn10.0 the UM code is located on the Met Office Science Repository Service:
<https://code.metoffice.gov.uk>
- This service will host other Met Office codes (e.g. JULES, GCOM) and collaborative projects (e.g. GA, GL, GO and GSI).
- Access must be requested via NCAS-CMS

Interaction with PUMA







Short-term:

- UM vn10.0 to be installed on Archer
- MONSooN upgrade to Cray XC40 (Summer 2015)

Medium term:

- N1024 -> N2048 global forecasts
- UKESM(-Hi /-Lo) Earth system model
 - Proposed to include land ice sheets, ocean biogeochemistry, plus carbon and nitrogen cycles

Long term:

- LFRiC replacement for the UM
- GungHo highly scalable dynamical core