GMAT 2013a Release Process

This page is used to track the process and progress of the R2013a release.

Table of contents

Target Date: April 16, 2013

Tasks

All dates are referenced to 12:00 noon EDT.

For example, a deadline of March 15 should be interpreted as March 15, 12:00 noon EDT.

Early Tasks

These are long-lead early tasks that can be completed before the detailed release cycle.

Use "`(/)`" for the checkmark (✅).

Task	Who	Status	Notes
Get updated legal statement/license	SPH	✅	Needed by Code Freeze.
Update sample scripts	SPH	✅	Needed by App Freeze. • Write examples that demonstrate new functionality • Clean up all errors and warnings • Remove deprecated fields
Write draft Release Notes	JJKP	✅	Needed by App Freeze. See Writing Release Notes
Update standard descriptive text	SPH	✅	Needed by App Freeze. Will be used in User Guide, websites, release announcement. Commet from SPH: See Welcome to GMAT in user guide
Update info on public-facing websites	JJKP	✅	Needed by Release Day. See the list of sites. Update this list as well, if necessary. *Updated major sites before announcement. Minor ones can be updated a bit later.*

| Update release announcement contacts | SPH | ✅ | Needed by Release Day. Located here. |
| Put in order for additional icons | SPH | ✅ | (if necessary)

Needed by Visual Freeze. |

For QA Complete (March 20)

QA complete means that all known bugs are being tracked, all bug fixes are verified and documented, and the release process can begin.

Use "(/)" for the checkmark (✅).

Task	Who	Status	Notes
Verify that all known bugs are checked into JIRA	(All)	✅	
Complete all JIRA verifications	(All)	✅	
Complete QA wrap-up tasks	DSC, SPH, JJKP, RQ	✅	• GUI rename/delete
Address all JIRA tickets awaiting feedback	(All)	✅	

For Visual Freeze (Mar 27)

Visual Freeze finalizes all graphical changes to the software, so that screenshots, documentation, and TestComplete can be updated.

Use "(/)" for the checkmark (✅).

Task	Who	Status	Notes
Update links in GMAT.ini	JJKP	✅	• Help links • Welcome page links *Is this really a viz freeze issue?*
Update link tests in TestComplete	SJH	✅	• Help buttons • Welcome Page links • Help menu links *This was delayed because of some last-minute behavior changes, but nothing here was required for Visual Freeze this time.*
Update About panel	LOJ	✅	*Not needed for R2013a*
Update splash screen	TGG	✅	1. Update `SplashScreen.psd` in `GmatDevelopment\moredata\graphics\splash` 2. Use GIMP to save a flattened TIF file and overwrite splash screen in `GmatDevelopment\application\data\graphics\splash`. *This was delayed until (TBD) to allow the team to vote on the final design at the 3/28 team meeting.*
Update icons	SPH	✅	If there are any updates, additions, deletions.
Update `gmat_startup_file.txt`	JJKP	✅	• Update formatting, comments • Switch to release configuration
Switch to release configuration in script test system	JJKP	✅	Use new `rundef.R2013aInternal.template.m`. *Ran public configuration manually on JJKP's machine on 2013-03-27 build. Decided to run manually on RCs only. For next time, need to figure out a way to assemble public release without manual intervention.*
Complete visual updates	(All)	✅	*Fixed all visual issues known before Visual Freeze.*

For Code Freeze (April 5) *(was April 3)*

Code Freeze is a freeze on the software itself before final testing.

Use "(/)" for the checkmark (✅).

Task	Who	Status	Notes
Update EOP files	WCS	✅	Update `eopc04_08.62-now` and run smoke tests.
Update files w/ updated legal statement	LOJ	✅	
Update license text	LOJ	✅	Update `application/License.txt` file.
Final bug fixes	(All)	✅	

> For next release: Consider branching the repo here, instead of after release. We need to allow people to continue working on unrelated items while release work is ongoing.

For App Freeze (April 5) *(was April 3)*

App Freeze is a freeze on all application bundle files beyond data and code. This includes documentation, sample scripts, stuff in the `extras` folder, etc.

Use "`(/)`" for the checkmark (✅).

Task	Who	Status	Notes
Update `README.txt`	JJKP	✅	Update with major release highlights.
Update extras folder	JJKP	✅	Notepad++ syntax coloring file
Update PDF files in docs folder	SPH/DJC	✅	• `Done (DJC) GMAT-Architectural-Specification.pdf` • `Done (DJC) GMATEstimationSpecification.pdf` • `Done (SPH) GMATMathSpec.pdf` • Update watermark: "Draft for Release R2013a" • Put into application/docs folder, and individual doc source folders
Gather list of compatibility changes since last release	(Feature leads)	✅	• Deprecated fields • Removed & disabled fields • Anything a user would need to know to make R2012a scripts compatible with this release. *For this release, put a generic blanket statement regarding the change from beta status to production status and point to wiki page.*
Update Release Notes	JJKP	✅	
Update screenshots in User Guide	(Feature leads)	✅	
Test User Guide instructions & code	(Feature leads)	✅	• Tutorials • Common Tasks • script snippets • reference page examples
Update Windows installer package	JJKP	✅	

Testing of Release Candidate 1 (April 5–12)

This will start with the 2013-04-05 daily build. **Repeat this phase until tests check out.** Steve will make the call.

Use "`(/)`" for the checkmark (✅).

Task	Who	Status	Notes
Update README.txt	JJKP	✅	(For RC2+) Update with any late-breaking notes.
Build Windows installer	JJKP	✅	Version string: R2013a-rc#
Bundle Windows zip	JJKP	✅	Version string: R2013a-rc#

Run TestComplete smoke tests	TGG	✅	These are tests on the packaged versions of GMAT: the installer and the zip bundle.
Run TestComplete system test missions	JMB	✅	These are tests on the packaged versions of GMAT: the installer and the zip bundle.
Run script test system	JJKP	✅	Run the internal installer tests on T4 and the public installer tests on Joel's machine. Run .zip bundle tests afterwards on same build to compare.
Test all sample scripts	SPH	✅	At a minimum these need to be run individually by hand. I ran them by adding the folder, and they run so fast I missed some pretty big problems. Ideally, these should all be in script regression tests. Many but not all already are regression tested.
Run TestComplete full regression tests	TGG	✅	(For final RC only)

> **Notes**
> * While this cycle is ongoing is a good time to do wiki updates and cleanup.

Stage Release (April 15)

This is a soft release, putting all the files in place and updating information. Then on release day, we only need to send the announcements.

Use "(/)" for the checkmark (✅).

Task	Who	Status	Notes
Bundle source code and upload to SourceForge	DJC	✅	1. Export the trunk code from svn that is used for the release build when that build is started 2. Wait for a go/nogo call from testing on the build 3. Archive the following folder trees into a zip file: src, plugins, build 4. Move the zip file to SF 5. Mark as "staged" 6. Download the upload and check it
Bundle data and upload to SourceForge	DJC	✅	1. Use the same export as used for the source bundle 2. Wait for a go/nogo call from testing on the build 3. Archive the following folder tree into a zip file: application/data 4. Move the zip file to SF 5. Mark as "staged" 6. Download the upload and check it
Upload Windows installer to SourceForge	JJKP	✅	Download, install, and run after uploading.
Upload Windows zip to SourceForge	JJKP	✅	Download and run after uploading.
Post README.txt on SourceForge	JJKP	✅	
Post internal & public release files to MESA network	JJKP	✅	
Branch and tag repositories	DJC	✅	At least tag the test system; consider branching also if the burden on the repo is low.
Make SourceForge repository backup	JJKP	✅	Follow SourceForge's instructions. Perform the backup on the Linode server and download the resultant .zip file, since the local network blocks rsync.

Release Day (April 16)

Use "(/)" for the checkmark (✅).

Task	Who	Status	Notes
Make files visible on SourceForge	SPH	✅	

Send out release announcement	SPH	✅	• Mention GSFC in the announcement • Don't include large attachments.
Post release announcement on SourceForge	DJC	✅	
Post release announcement on GMAT Blog	JJKP	✅	

Post-Release

Use "`(/)`" for the checkmark (✅).

Task	Who	Status	Notes
Party!	(All)	❌	• Darrel is visiting sometime in April. Let's do something then.
Print materials	JJKP	❌	• Printed documentation (reference booklet, full User Guide) • Release CDs
Conduct postmortem review	SPH	❌	This includes gathering feedback, holding the postmortem meeting, and documenting the results.
Submit NTR for next release	SPH	❌	
Spring cleaning	?	❌	General cleanup of infrastructure: • Wiki • `\\mesa-file\595\GMAT` • get rid of old SVN branches • anything else?

Notes for postmortem

Please add your notes to the Release R2013a Process Notes document.

Compatibility changes

This is a list of compatibility changes since R2012a that need to be captured in the release notes.

- Spacecraft.CurrA1MJD parameter is deprecated
- ImpulsiveBurn.V, ImpulsiveBurn.N, ImpulsiveBurn.B parameters are deprecated
- non-Earth planet NutationUpdateInterval field is removed
- restricted setting CoordinateSystem Epoch, Primary, Secondary, XAxis, YAxis, ZAxis fields
- restricted setting CoordinateSystem Origin field

See Writing Release Notes

Running script test system

In the steps below, "`#`" is the RC number and "`<config>`" is "`internal`" or "`public`".

1. Install the version being tested.
    a. Check "Enable MATLAB interface".
    b. Leave "Associate file types" unchecked.
2. Update the test system repo.
3. Run:
   `>> diary('..\log\R2013a-rc#-<config>.log')`
4. Run:
   `>> preparegmat('C:\Path\To\GMAT')`
5. Copy the appropriate template (`autorundef.R2013aInternal.template.m` or `autorundef.R2013aPublic.template.m`) to a new name and fill in the values:
    a. `RunDef.Build`: "`R2013a-rc#-<config>`"
    b. `RunDef.GmatExe`: path to installed `GMAT.exe`
    c. `RunDef.RegressionBuild`: last build date if testing RC1, otherwise, "`R2013a-rc#-<config>`"

6. Run:
   >> `gmattest <name of rundef.m>`
7. Run:
   >> `diary('off')`
8. Post results to network using `robocopy`:
   ```
   >robocopy "C:\path\to\output\R2013a-rc#" "\\mesa-file\595\GMAT\TestResults\win7\R2013a-rc#-<config>"
   /E /MT /LOG:robocopy.txt
   ```

Issues for RC3

- GMT-3794 (still open)
- GMT-3826
- Run graphics regression tests (still open)
- Run toolbar/menubar regression tests

Issues for RC2

- GMT-3745 - fix
- GMT-3794 - fix
- GMT-3795 - fix
- GMT-3797 - fix
- GMT-3817 - fix if time allows
- GMT-3816 - don't fix
- GMT-3803 - don't fix
- Update scripts for estimation functionality - fix
- What to do about MATLAB Interface in bundle? - update installer if time allows
- Proper covers on the PDF User Guide - fix
- Run graphics regression tests - fix