

# GMAT 2013b Release Process

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

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**Target Date: August 14, 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 (✓) and "(x)" for the cross (✗)

Task	Who	Status	Internal Status	Notes
<a href="#">Review Previous Build Release R2013a Process Notes</a>	All	✓	✓	
Get updated legal statement/license	SPH	N/A	N/A	Needed by Code Freeze.
Update sample scripts	SPH	✗	✓	Needed by App Freeze. <ul style="list-style-type: none"><li>• Write examples that demonstrate new functionality</li><li>• Clean up all errors and warnings</li><li>• Remove deprecated fields</li></ul>
Write draft Release Notes	JJKP	✓	✓	Needed by App Freeze. <a href="#">See Writing Release Notes</a>
Update standard descriptive text	SPH	N/A	N/A	Needed by App Freeze. Will be used in User Guide, websites, release announcement.

Update info on public-facing websites	JJKP	N/A	N/A	Needed by Release Day. See the <a href="#">list of sites</a> . Update this list as well, if necessary. <i>Updated major sites before announcement. Minor ones can be updated a bit later.</i>
Update release announcement contacts	SPH		N/A	Needed by Release Day. Located <a href="#">here</a> .
Put in order for additional icons	SPH			(if necessary) Needed by Visual Freeze.
Configuration audits.				PCA and FCA. New for Release 2015 based on NPR stuff.

## For QA Complete (August 1)

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 () and "(x)" for the cross ()

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		
Address all JIRA tickets awaiting feedback	(All)		

## For Visual Freeze (August 1)

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

Use "( / )" for the checkmark () and "(x)" for the cross ()

Task	Who	Status	Internal Status	Notes
Update About panel	LOJ	N/A	N/A	
Update splash screen	TGG			<ol style="list-style-type: none"> <li>Add new contributors</li> <li>Remove contributors who did not contribute to this release</li> <li>Design updates</li> <li>Update <code>SplashScreen.psd</code> in <code>GmatDevelopment\moredata\graphics\splash</code></li> <li>Use GIMP to save a flattened TIF file and overwrite splash screen in <code>GmatDevelopment\application\data\graphics\splash</code>.</li> </ol>
Update icons	TGG			If there are any updates, additions, deletions.
Update <code>gmat_startup_file.txt</code>	JJKP			<ul style="list-style-type: none"> <li>Update formatting, comments</li> <li>Switch to release configuration</li> </ul> <i>All new plugins are added.</i>
Switch to release configuration in script test system	JJKP			Use new <code>rundef.R2013bInternal.template.m</code> .  <i>Are we running public config tests for this release? For next time, need to figure out a way to assemble public release without manual intervention.</i>
Complete visual updates	(All)			<i>Fixed all visual issues known before Visual Freeze.</i>

## For Code Freeze (August 1)

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

Use "(/)" for the checkmark (✓) and "(x)" for the cross (✗)

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


For this release: Should we branch 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 (August 1)

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 (✓) and "(x)" for the cross (✗)









Task	Who	Status	Notes
Update <code>README.txt</code>	JJKP	✓	Update with major release highlights.
Update <code>extras</code> folder	JJKP	✓	Notepad++ syntax coloring file
Update PDF files in docs folder	SPH/DJC	✓	<ul style="list-style-type: none"> <li>Update watermark: "Draft for Release R2013b"</li> <li>Put into application/docs folder, and individual doc source folders</li> </ul>
Gather list of compatibility changes since last release	(Feature leads)	✓	<ul style="list-style-type: none"> <li>Deprecated fields</li> <li>Removed &amp; disabled fields</li> <li>Anything a user would need to know to make R2012b scripts compatible with this release.</li> </ul> <p><i>For this release, put a generic blanket statement regarding the change from beta status to production status and point to wiki page.</i></p>
Update Release Notes	JJKP	✓	See the <a href="#">R2013b Compatibility Issues</a> document.
Update screenshots in User Guide	(Feature leads)	✓ JJKP: ✓	
Test User Guide instructions & code	(Feature leads)	✓ JJKP: ✓	<ul style="list-style-type: none"> <li>Tutorials</li> <li>Common Tasks</li> <li>script snippets</li> <li>reference page examples</li> </ul>
Update Windows installer package	JJKP	✓	
Update links in <code>GMAT.ini</code>	JJKP	✓	<p><i>Moved from R2013a Visual Freeze Stage</i></p> <ul style="list-style-type: none"> <li>Help links <ul style="list-style-type: none"> <li>Welcome page links</li> </ul> </li> </ul>

Update link tests in TestComplete	TR		<ul style="list-style-type: none"> <li>• Help buttons</li> <li>• Welcome Page links</li> <li>• Help menu links</li> </ul>
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## Testing of Release Candidate 1 (August 5-9)

This will start with the 2013-08-01 daily build. **Repeat this phase until tests check out.** Steve will make the call.

Use "(/)" for the checkmark () and "(x)" for the cross ()

Task	Who	Status	Notes
Update README.txt	JJKP		
Build Windows installer	JJKP/TGG		Version string: R2013b-rc#
Bundle Windows zip	JJKP/TGG		Version string: R2013b-rc#
Run TestComplete smoke tests	TR		These are tests on the packaged versions of GMAT: the installer and the zip bundle.
Run TestComplete system test missions	TR		These are tests on the packaged versions of GMAT: the installer and the zip bundle.
Run script test system	JJKP/TGG		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	TR		(For final RC only)

### Notes


- While this cycle is ongoing is a good time to do wiki updates and cleanup.

## Stage Release (August 12)

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 () and "(x)" for the cross ()

Task	Who	Status	Notes
Bundle source code and upload to SourceForge	DJC	N/A	<ol style="list-style-type: none"> <li>1. Export the trunk code from svn that is used for the release build when that build is started</li> <li>2. Wait for a go/nogo call from testing on the build</li> <li>3. Archive the following folder trees into a zip file: src, plugins, build</li> <li>4. Move the zip file to SF</li> <li>5. Mark as "staged"</li> <li>6. Download the upload and check it</li> </ol>


<b>Bundle data and upload to SourceForge</b>	DJC	N/A	<ol style="list-style-type: none"> <li>1. Use the same export as used for the source bundle</li> <li>2. Wait for a go/nogo call from testing on the build</li> <li>3. Archive the following folder tree into a zip file: application/data</li> <li>4. Move the zip file to SF</li> <li>5. Mark as "staged"</li> <li>6. Download the upload and check it</li> </ol>
<b>Upload Windows installer to SourceForge</b>	JJKP	N/A	Download, install, and run after uploading.
<b>Upload Windows zip to SourceForge</b>	JJKP	N/A	Download and run after uploading.
<b>Post README.txt on SourceForge</b>	JJKP	N/A	
<b>Post internal &amp; public release files to MESA network</b>	JJKP	N/A	
<b>Branch and tag repositories</b>	JJKP		At least tag the test system; consider branching also if the burden on the repo is low.
<b>Make SourceForge repository backup</b>	JJKP	N/A	<p>Follow <a href="#">SourceForge's instructions</a>.</p> <p>Perform the backup on the Linode server and download the resultant .zip file, since the local network blocks rsync.</p>






## Release Day (August 14)

Use "( / )" for the checkmark () and "(x)" for the cross ()

Task	Who	Status	Notes
<b>Make files visible on SourceForge</b>	SPH	N/A	
<b>Send out release announcement</b>	SPH	N/A	<ul style="list-style-type: none"> <li>• Mention GSFC in the announcement</li> <li>• Don't include large attachments.</li> </ul>
<b>Post release announcement on SourceForge</b>	DJC	N/A	
<b>Post release announcement on GMAT Blog</b>	JJKP	N/A	

## Post-Release

Use "( / )" for the checkmark ()

Task	Who	Status	Notes
<b>Party!</b>	(All)		
<b>Print materials</b>	JJKP		<ul style="list-style-type: none"> <li>• Printed documentation (reference booklet, full User Guide)</li> <li>• Release CDs</li> </ul>
<b>Conduct postmortem review</b>	SPH		This includes gathering feedback, holding the postmortem meeting, and documenting the results.
<b>Submit NTR for next release</b>	SPH		
<b>Spring cleaning</b>	?		<p>General cleanup of infrastructure:</p> <ul style="list-style-type: none"> <li>• Wiki</li> <li>• \\mesa-file\595\GMAT</li> <li>• get rid of old SVN branches</li> <li>• anything else?</li> </ul>

## Notes for postmortem

Please add your notes to the [R2013b Lessons Learned](#) document.

# Compatibility changes

This is a list of compatibility changes since R2013a that need to be captured in the release notes.

- ?

See [Writing Release Notes](#)

## Creating an RC

1. Create the build
  - a. Log into `gs580w-gmat-t4` as "`gs580w-gmat-t4\builduser`". The credentials are on the network drive, in the `Infrastructure` folder.
  - b. Start Task Scheduler.
  - c. [RC1 only] Disable the "GMAT Daily Build" task, so it doesn't run automatically during the RC cycle (this can make things overly confusing).
  - d. Manually run the "GMAT Daily Build" task.
2. Create the bundles
  - a. On your local system, navigate to `SourceForge\trunk\build\install\windows-nsis`. There's a `README.txt` file there that explains things.
  - b. Open a MinGW Shell in this directory.
  - c. Run "`make VERSION=R2013b-rc#`", where "`#`" is the number of the RC you're creating. This will create four packages in the current directory: A `.zip` and a `.exe` file for both the internal and public versions.
  - d. Copy the four package files to the network: `\\mesa-file\595\GMAT\Builds\windows\VS2010_build`
  - e. To clean everything up afterwards, run "`make clean`".
3. Run the script test system on the internal installer package. See [Running the script test system](#), below.

## Running the script test system

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

1. Log into `gs580w-gmat-t4` as "`gs580w-gmat-t4\testuser`". The credentials are on the network drive, in the `Infrastructure` folder.
2. [RC1 only] Start Task Scheduler and disable the "Run Script Test" task. You'll need to run the RC tests manually.
3. Uninstall all previous versions of GMAT.
4. Install the version being tested.
  - a. Check "Enable MATLAB interface".
  - b. Leave "Associate file types" unchecked.
5. Update the test system repo (located at `C:\Users\testuser\Documents\GmatTest`)
6. In MATLAB (64-bit):
  - a. Run:

```
>> cd C:\Users\testuser\Documents\GmatTest\bin
```
  - b. Run (replace `#` with RC number and `<config>` with "`internal`" or "`public`"): 

```
>> diary('..\log\R2013b-rc#-<config>.log')
```
  - c. Run (this command copies application files such as SPICE kernels needed for regression tests into the new installation of GMAT): 

```
>> preparegmat('C:\Path\To\GMAT')
```
  - d. In `C:\Users\testuser\Documents\GmatTest\bin`, copy the appropriate template (`autorundef.R2013bInternal.template.m` or `autorundef.R2013bPublic.template.m`) to a new name (such as `autorundef.R2013bInternalRC1.template.m`) and fill in the values:
    - i. `RunDef.Build`: "`R2013b-rc#-<config>`"
    - ii. `RunDef.GmatExe`: path to installed GMAT.exe
    - iii. `RunDef.RegressionBuild`: last build date if testing RC1 (look in `GmatTest\output` for latest folder, such as `2013-07-31`), otherwise, "`R2013b-rc#-<config>`"
  - e. Run: 

```
>> gmattest <name of rundef.m> (e.g. autorundef.R2013bRc1Internal.m)
```
  - f. Wait until run completes (usually 8+ hours)
  - g. Run: 

```
>> diary('off')
```
7. In a Windows `cmd` window, post results to network using `robocopy`:

```
>robocopy "C:\Users\testuser\Documents\GmatTest\output\R2013b-rc#-<config>"  
"\\mesa-file\595\GMAT\TestResults\win7\R2013b-rc#-<config>" /E /MT /LOG:%TEMP%\robocopy.txt
```

## Issues for RC1

- ???