How to Add an SSH Public Key on GitHub and Make a Submission

1. Go to the GO Competition login page <u>https://gocompetition.energy.gov/user/login</u> and log in using the username or e-mail and password associated with your account.

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→ ① ▲ https://gocompetition.energy.gov/user/login	C C	Q. Search	☆ 自	↓ 佘		≡
GRID OPTIMIZATION (GO) COMPETITION	Qs			Log in		
Create new account Log in Request new password						
Notice						
WARNINGWARNING**WARNING**WARNING**						
This is a Department of Energy (DOE) computer system. DOE computer systems within DOE computer systems is owned by the DOE, and may be audited, intercer personnel. THERE IS NO RIGHT OF PRIVACY IN THIS SYSTEM. System personn authorities. USE OF THIS SYSTEM BY ANY USER, AUTHORIZED OR UNAUTHOR COPYING, CAPTURING, and DISCLOSURE OF COMPUTER ACTIVITY. **WARNING**WARNING**WARNING**WARNING** Note. Please use Mozilla Firefox to access our website for the best user experience.	are provided for the processing of o pted, recorded, read, copied, or cap lel may disclose any potential evider NZED, CONSTITUTES CONSENT TO	official U.S. Government information onl itured in any manner and disclosed in a ice of crime found on DOE computer sy D THIS AUDITING, INTERCEPTION, Ref	y. All data cor iny manner, b ristems to app CORDING, Rf	ntained y authoriz ropriate EADING,	ed	
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2. Upon login you will be in your "My account" page. The SSH information is on your Team page, which is accessible from the My account page or the <u>Competition Overview</u> by clicking the TEAM: xxx button (TEAM: STARS in this example).



3. On the Team page you will see a blue box called COPY SSH INFORMATION



- 4. Click on the blue box to put the SSH information into your copy buffer (don't copy anything else until you complete the paste in step 10).
- 5. Go to the GitHub login page (<u>https://github.com/login</u>) and log in using the username/e-mail address and password associated with your account.

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Sign in	to GitHub
Username or emai	l address
Password	Forgot password
	Sian in

6. From the list of Your repositories, select the GO Competition related repository (GAMS in this example)

Your rep	ositories	7	Ne	w repository
Find a re	epository			
All	Public	Private	Sources	Forks
GAM	s			

7. Click the "Settings" option from the tab bar along the top of the page.

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8. Click the "Deploy keys" option from the pane on the left hand side of the page.

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Options	Settings	
Collaborators	Repository name	
Branches	GAMS Rename	
Webhooks		
Integrations & services	Features	
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9. Click "Add deploy key" button on the right hand side of the page.

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Options	Deploy keys		Add deploy key
Collaborators	There are no deploy keys for this repository		
Branches			
Webhooks			
Integrations & services			
Deploy keys			

Enter a "Title" (e.g. GO Competition) and copy the SSH Public Key in the copy buffer (from step 3—no copying meanwhile) into the "Key" input field and click the green Add key button.

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Options	Deploy keys	Add deploy key
Collaborators	There are no deploy keys for this repository	
Branches		
Webhooks	Title	
Integrations & services	GO Competition	
Deploy keys	Key	
	AAAAB3NzaC1yc2EAAAABIwAAAQEA71uauPG1mOPuba	qWnAE7HtaSBC14BO8jVkN8D09UklFMDNqrh7Ewgp
	 TPfbA4y81Ln+U+10VZQ== svcarpacomp@arpacomp.pr	nl.gov
	Allow write access	
	Can this key be used to push to this repository? Deploy keys alwa	iys have pull access.
	Add key	

11. You may now return to the GO Competition Submission page, fill the information (Language and Dataset are selected from drop-down menus), and submit an algorithm for evaluation by clicking on the green SUBMIT button.

TEAM: STARS
Submission Name GAMS example submission Provide a simple name to help you distinguish between submissions. Submission Notes Ities is for an example submission Piease enter any notes you may have regarding this submission Repository Name* GAMS Piease enter fany notes you may have regarding this submission Repository Name* GAMS Piease enter the name of the repository you would like us to pull from. Repository Branch master CAMS Mat language is the executable for? Disset* Piease select the data set to be evaluated against.

12. The resulting screen gives a unique SubmissionID (red oval) that is used to track the submission. The Submission History shows no results immediately after submission.

	Submission Information
	Team Name: Stars Submission Name: GAMS example submission
	Submission Notes: this is an example submission
	Repository Branch: master
	Repository Name: GAMS
	Language: GAMS
	Dataset: Phase 0 IEEE 14 Bus
Submission History	

13. After evaluation and scoring have completed the submissionID page shows the various steps in the process. The final step gives the URL where the results may be downloaded (red oval) and the score received (blue oval).

	- Submission Informa	ation	
	Team Name: Stars		
	Submission Name:	GAMS example submission	
	Submission Notes:	this is an example submission	
	- Technical Details		
	Repository Branch:	master	
	Repository Name: G	GAMS	
	Language: GAMS		
	Dataset: Phase 0 IEE	EE 14 Bus	
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omission History Date/Time	Status	Status Notes	Valu
Date/Time 2017 Jun 13 16:02:50	Status scoring finished	Status Notes Logs and results are available hele: https://dtn2.pnl.gov/arpacomp/v1/7-1497394783.tar.gz	Valu 30958.5
Date/Time 2017 Jun 13 16:02:50 2017 Jun 13 16:02:20	Status scoring finished metric - solved within time and no violations	Status Notes Logs and results are available here: https://dtn2.pnl.gov/arpacomp/v1/7-1497394783.tar.gz Number of scenarios solved within the time cut-off and no violations	Valu 30958.3 100.0
Date/Time 2017 Jun 13 16:02:50 2017 Jun 13 16:02:20 2017 Jun 13 16:01:50	Status scoring finished metric - solved within time and no violations metric - solved within time	Status Notes Logs and results are available hele: https://dtn2.pnl.gov/arpacomp/v1/7-1497394783.tar.gz Number of scenarios solved within the time cut-off and no violations Number of scenarios solved within the time cut-off	Valu 30958.5 100.0
Date/Time 2017 Jun 13 16:02:50 2017 Jun 13 16:02:20 2017 Jun 13 16:01:50 2017 Jun 13 16:01:20	Status scoring finished metric - solved within time and no violations metric - solved within time metric - solved with no violations	Status Notes Logs and results are available held: https://dtn2.pnl.gov/arpacomp/v1/7-1497394783.tar.gz Number of scenarios solved within the time cut-off and no violations Number of scenarios solved within the time cut-off Number of scenarios solved with no violations	Valu 30958. 100.0 100.0
Date/Time 2017 Jun 13 16:02:50 2017 Jun 13 16:02:20 2017 Jun 13 16:01:50 2017 Jun 13 16:01:20 2017 Jun 13 16:00:49	Status scoring finished metric - solved within time and no violations metric - solved within time metric - solved within time evaluation finished	Status Notes Logs and results are available hele: https://dtn2.pnl.gov/arpacomp/v1/7-1497394783.tar.gz Number of scenarios solved within the time cut-off and no violations Number of scenarios solved within the time cut-off Number of scenarios solved with no violations Evaluation completed, scoring initiated.	Valu 30958.3 100.0 100.0
Date/Time 2017 Jun 13 16:02:50 2017 Jun 13 16:02:20 2017 Jun 13 16:01:50 2017 Jun 13 16:01:20 2017 Jun 13 16:01:49 2017 Jun 13 15:59:45	Status scoring finished metric - solved within time and no violations metric - solved within time started	Status Notes Logs and results are available hele: https://dtn2.pnl.gov/arpacomp/v1/7-1497394783.tar.gz Number of scenarios solved within the time cut-off and no violations Number of scenarios solved within the time cut-off Number of scenarios solved with no violations Evaluation completed, scoring initiated. Initiating evaluation.	Val 30958.5 100.0 100.0
Date/Time 2017 Jun 13 16:02:50 2017 Jun 13 16:02:20 2017 Jun 13 16:01:50 2017 Jun 13 16:01:20 2017 Jun 13 16:01:49 2017 Jun 13 15:59:44	Status scoring finished metric - solved within time and no violations metric - solved within time metric - solved within time metric - solved within time status status submitted	Status Notes Logs and results are available hele: https://dtn2.pnl.gov/arpacomp/v1/7-1497394783 tar.gz Number of scenarios solved within the time cut-off and no violations Number of scenarios solved within the time cut-off Number of scenarios solved with no violations Evaluation completed, scoring initiated. Initiating evaluation. Submission sent for processing.	Valu 30958.9 100.0 100.0

- 14. The tar.gz file has a separate directory (output1...output*n*) for each scenario (*n* is100 for this example) plus scenario_results.csv and score.txt files.
- 15. The scenario_results.csv file contains the identification information, the parameters used in scoring, and a summary of results from each scenario: the scenario number and the official time in seconds. For GAMS runs that produced a solution0.txt file, the summary information from line 3 of solution0.txt for each scenario is copied to scenario_results.csv.

- 16. The score.txt file is also a csv file with the score, objective value (computed from the solution), the maximum feasibility violation, the associated Contingency ID (base case is 0), and the official time for each scenario. With the scoring parameters in scenario_results.csv and the values in score.txt, the computed score for each scenario can be verified. The score shown in the Submission History panel above is the geometric mean of each of the scenario scores.
- 17. Each of the output directories contains the solution1.txt and solution2.txt files used to evaluate the solution. Language dependent output and log files are also included. For the GAMS example used here these include log1.txt, submission.log, solution0.txt, and four GAMS lst files. See the <u>Tutorial on submitting reference GAMS code</u> for a complete explanation.