More Flexible Email

Issue: in the gene flow web services, after the user inputs the parameters, the application processes the input and sends the results to the user in the name of [uiuc123456@163.com](mailto:uiuc123456@163.com). There are several problems here. 1) This address is informal and might be blocked. An email address from an educational institute might be more appropriate. 2) The address is hardcoded into the java code. When you want to send results from other addresses, you have to specify the SMTP server, username, password and a bunch of configurations, after doing that, you have to recompile the Java code and put the bytecode into a jar file. You have to do a lot of things to make it work.

Solution: To make things more flexible and more convenient to use. We change the strategy to send email to users. We add SMTP service to the local machine; this can help us from inputting detailed information when we are using a third party SMTP server such as smtp.google.com to send email. Further, this strategy is more flexible and convenient. In fact, it can send email from arbitrary email address even fake ones (Of course, as long as it is not blocked by the receiving email server). Combined with the PHP built-in mail function, the code is much shorter than the corresponding Java code. The following is a sample code of sending email from local machine using the “gene-flow@isws.illinois.edu” email address and the PHP email function. The original code sending email using Java program in “daemon.php” in the horseweed folder is replaced by the following code.

<?php

ini\_set('SMTP','127.0.0.1'); // send email from local machine

ini\_set('sendmail\_from', 'gene-flow@isws.illinois.edu');

// send email from 'gene-flow@isws.illinois.edu', it can be arbitrary email address.

$to = 'yeyedong@163.com';

$subject = 'Example subject';

$body = 'With an example body…';

mail($to, $subject , $body); // PHP function to send email.

?>

To install SMTP service on local machine,

1) Open “server manager”

2) Right click “Features”, select “add features”

3) In the “Features:” panel, check “SMTP Server”, click next and finish.

Note: The mails sent by the local SMTP server might be blocked by McAfee. You have to check the log of McAfee and set up the blocking rules of McAfee. Open McAfee console, double click “access protection”, click “Anti-virus Standard Protection”, and uncheck “Prevent mass mailing worms from sending mail”.