

# Draft 2: LTERgrid Pilot Application

*David Gehrig, dgehrig@ncsa.uiuc.edu*

## State Information

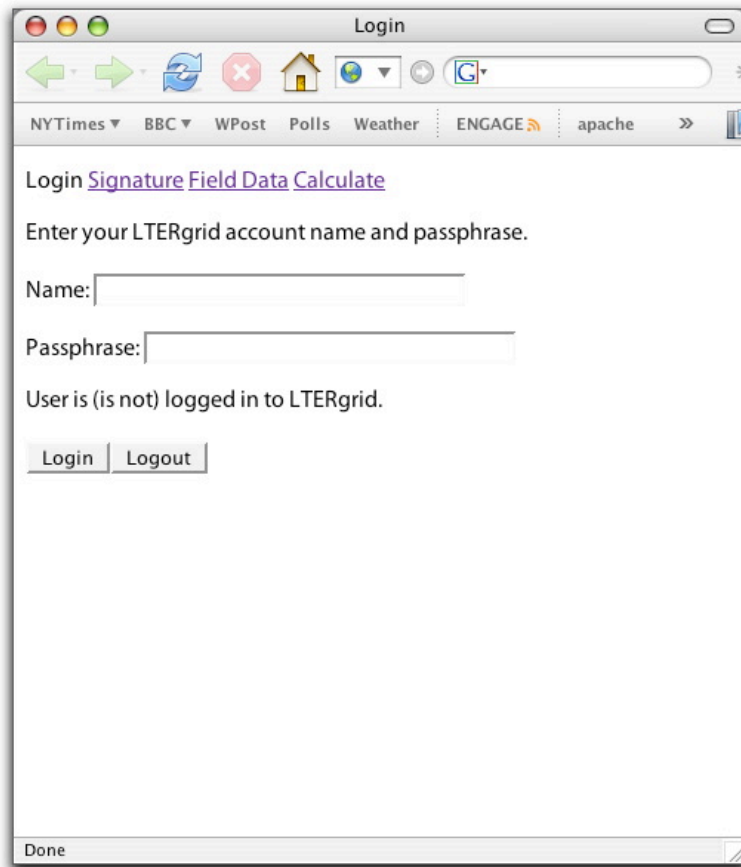
At any given time, a session has the following information associated with it:

- user
- selected signature
- range of selected
- a list (potentially zero) of field data recordings to test

After a calculation has been made, there is additional information associated with the session:

- a list of strings representing the results of the calculation; each string in the list gives the matching percentage of a signature against a field data recording and also identifies (a) the recording and (b) the Matlab-generated graphic associated with the recording.

## Login Page



The screenshot shows a web browser window titled "Login". The address bar contains "NYTimes", "BBC", "WPost", "Polls", "Weather", "ENGAGE", and "apache". The main content area displays the following text and form elements:

Login [Signature](#) [Field Data](#) [Calculate](#)

Enter your LTERgrid account name and passphrase.

Name:

Passphrase:

User is (is not) logged in to LTERgrid.

Done

For all pages, the line of links at the top labeled “Login / Signature / Field Data / Calculate” can be used to go back and forth between various pages.

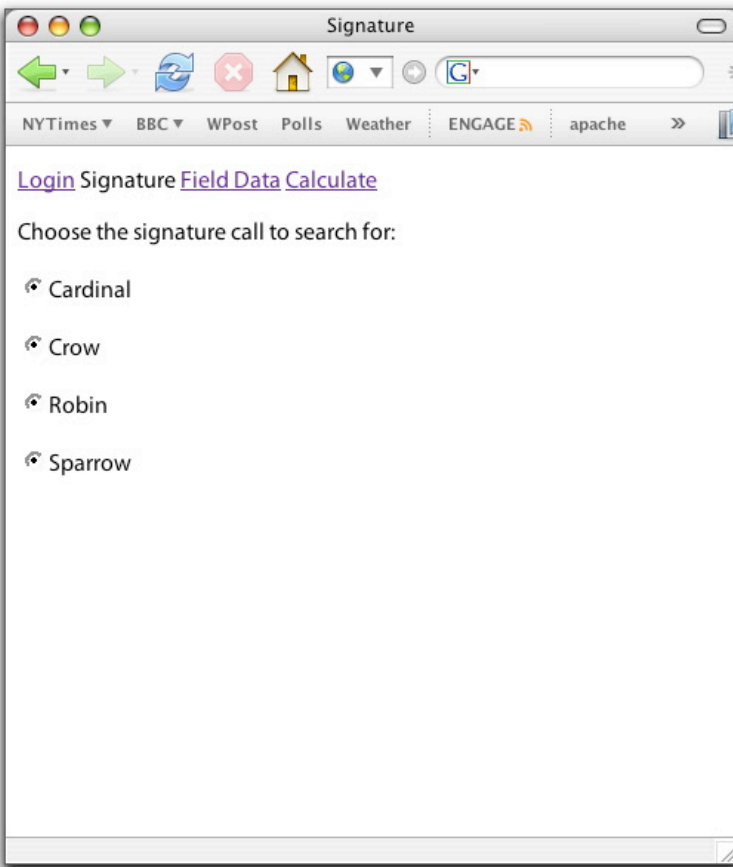
The fields “Name” and “Passphrase” are blank at the beginning of the session. The user will fill them in.

The line of text “User is (is not) logged in to LTERgrid” will change depending on whether or not the user is logged in.

If the user clicks “Login,” the data in the “Name” and “Passphrase” fields is used to authenticate to LTERgrid.

If the user clicks “Logout,” the user proxy for that session is destroyed.

## Signature Page



For all pages, the line of links at the top labeled “Login / Signature / Field Data / Calculate” can be used to go back and forth between various pages.

There are a series of hard-coded signatures, each with a radio button. Clicking one button on sets the other buttons to off.

## Field Data

Field Data

NYTimes ▾ BBC ▾ WPost Polls Weather ENGAGE apache >>

[Login](#) [Signature](#) [Field Data](#) [Calculate](#)

0 tests currently selected.

Choose a field site:

Choose a range of dates (mm/dd/yyyy):

Start:

End:

Choose a range of times (hh:mm):

Start:

End:

Select all day

For all pages, the line of links at the top labeled “Login / Signature / Field Data / Calculate” can be used to go back and forth between various pages.

The text “X tests currently selected” gives the number of field data recordings that are currently selected for calculation.

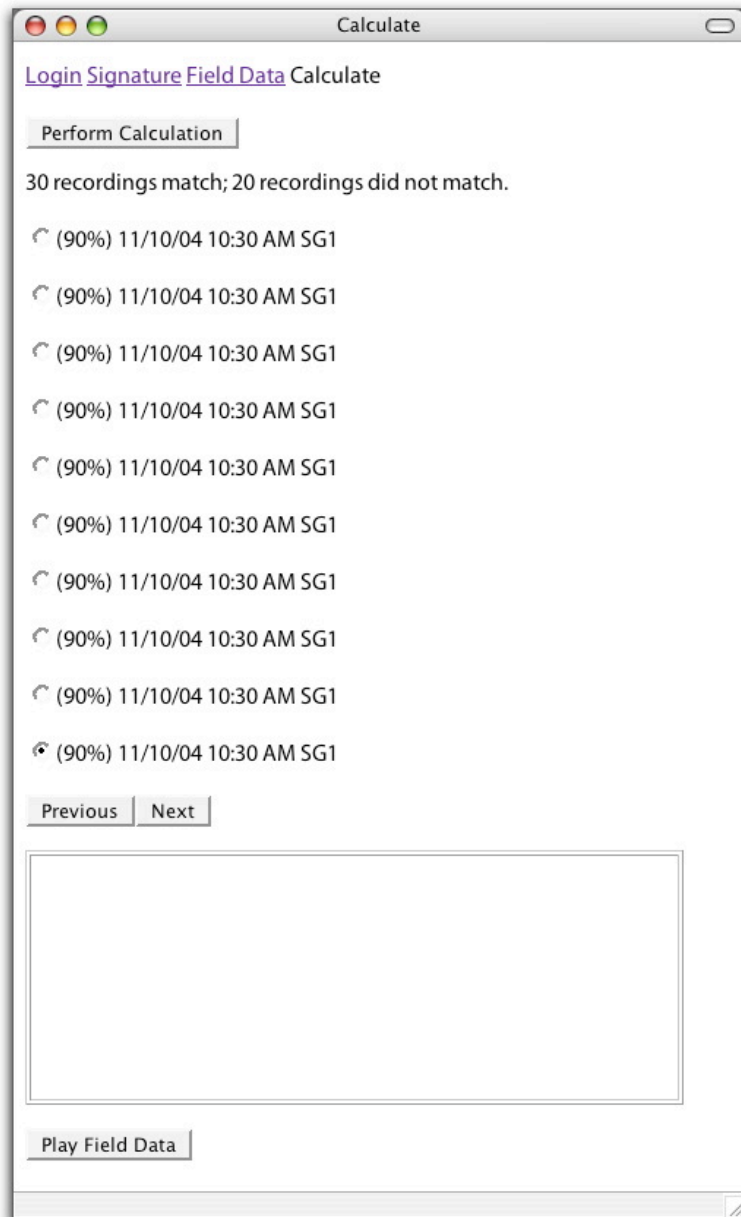
Clicking the “Update Test Count” button recalculates the number of field recordings selected. (It will need to query MetaCat using the information from this page and pull back a list of the field recordings selected in order to make this count.)

The “Choose a field site” dropdown list is a dummy in this phase. In later phases, it will be used to select the field site from which the recordings should be selected.

The user will add text strings representing the start and end dates of the range of field recordings to be analyzed.

The user will add a range of times, or click the “Select all day” check box.

## Calculate Page



The “Perform Calculation” box takes the state information and sends the job to the grid. The compute job sends back a vector of strings reporting how close a calculated match each field data recording is to the chosen signature. These are sorted by match probabilities.

The series of radio buttons are initially blank and unlabeled; they are given labels based on the results of the calculation. There are no more than ten radio buttons; if more field data recordings were tested, they are presented ten at a time, with the “Previous” and “Next” buttons paging between them.

When a radio button is pushed, the Matlab-generated graphic associated with that button is put into the blank field at the bottom.

The Play Field Data button plays the field data recording associated with the selected result button.