Flight Data Transmission System

User Manual

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Documentation Version: 1.0

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Document History

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Software Release History

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Contents

1. Introduction

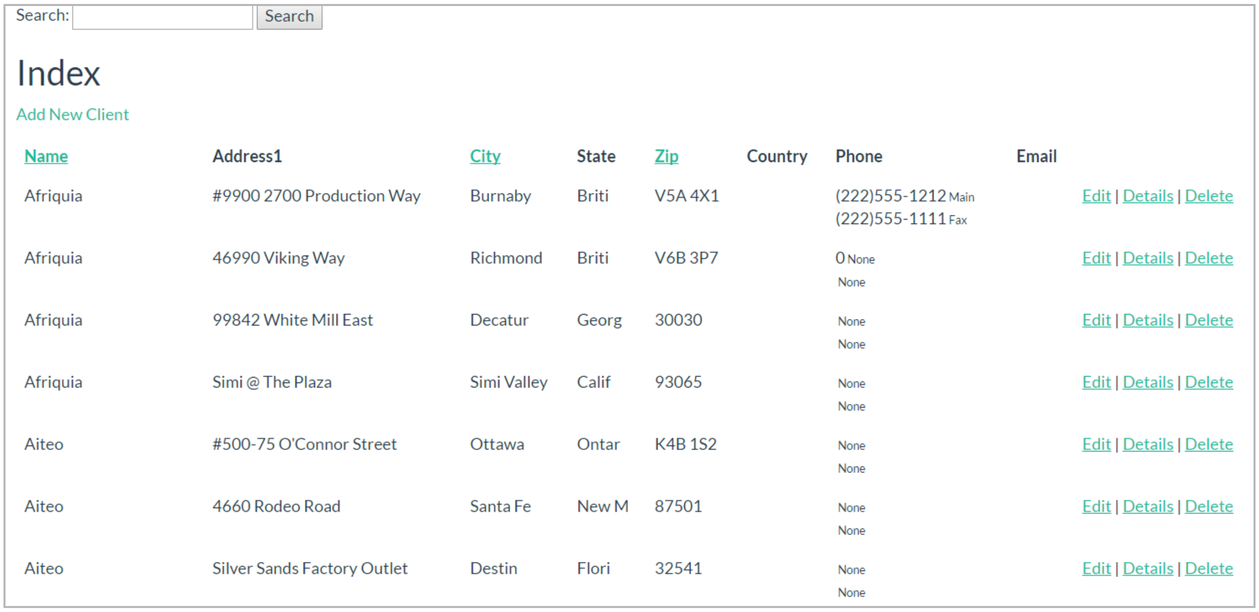
1.1. Functional Description

This document describes the functionality, capabilities, and limitations of the alpha product, Flight Data Transmission System(FDTS), CIT275's functional contribution to Interactive Aerial's(IA) data collection practices.
See the Technical Document for a system overview and a step by step process for setting up and configuring the application's different components. This manual will provide explanations for using the application after initial configuration.

1.2. Capabilities Overview

This application provides the ability to retrieve the log files generated by a client's UAV during flight. The web application acts as an entity management tool by pulling client and log data from the SQL database and displaying it in a manner by which queries, filters, and sorts can be performed on the data and in which users can download log files, assign assets to clients, and process uploaded files as well as manually upload log files.

2. Managing Clients



2.1. Create

To create a client, click on the Add New Client button at the top of the Client Index page. Fill out the form, ensure that all required fields are filled out properly, and hit Create. The User will now show up on the Client Index page.

2.2. Details

To view details of a client, click on the Details link found on the Client Index page next to the client you would like further information on.

2.3. Edit

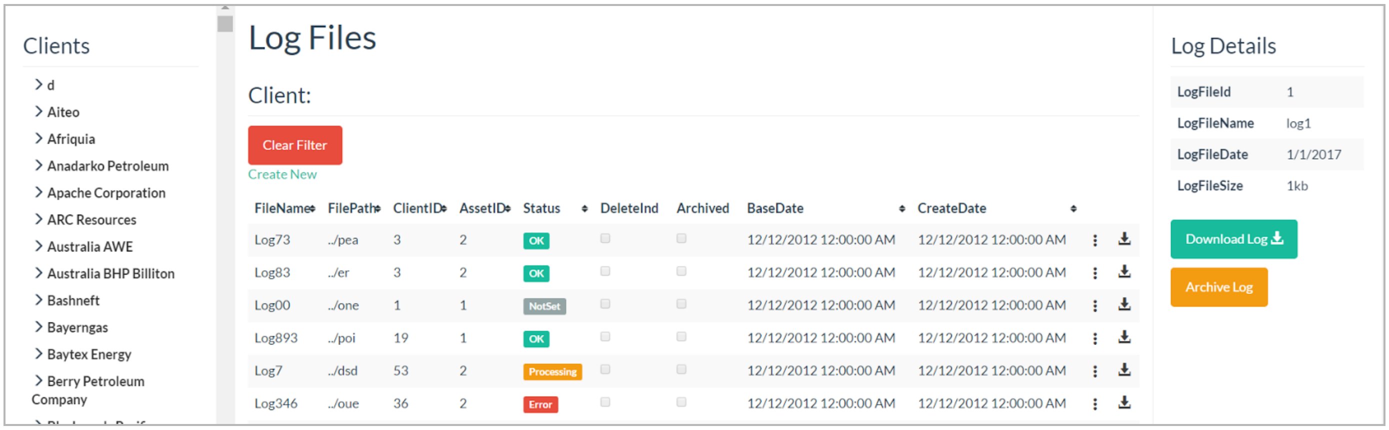
To edit a client, click on the Edit link found on the Client Index page next to the client you would like to edit. Once you add, remove, or alter client information, either click Save to save the changes or “Back to list” to discard the changes and navigate back to the Client Index page.

2.4. Delete

To delete a client, click on the Delete link found on the Client Index page next to the client you would like to delete. A window will load, asking for confirmation to delete the client. Click Delete to delete the client, or “Back to listing” to navigate back to the Client Index page.

3. Managing Logs

When first getting on the page, the table will be filled with the 30 newest log files.



3.1. Create

To create a new log file, click on the Create New button at the top of the Log File Index page. Fill out the form, ensure that all required fields are filled out properly, and click Create. The log file will now show up on the Log File Index page.

3.2. Details

To view details of a log file, navigate to the menu symbol found at the far right of a log file on the Log File index page and select Details.

3.3. Edit

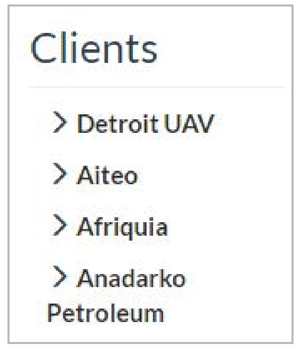
To edit a log file, navigate to the menu symbol found at the far right of a log file on the Log File index page and select Edit. This will allow the user to edit an existing log file’s information. When finished, either click Save to save the changes or “Back to list” to discard the changes and navigate back to the Log File Index page.

3.4. Delete

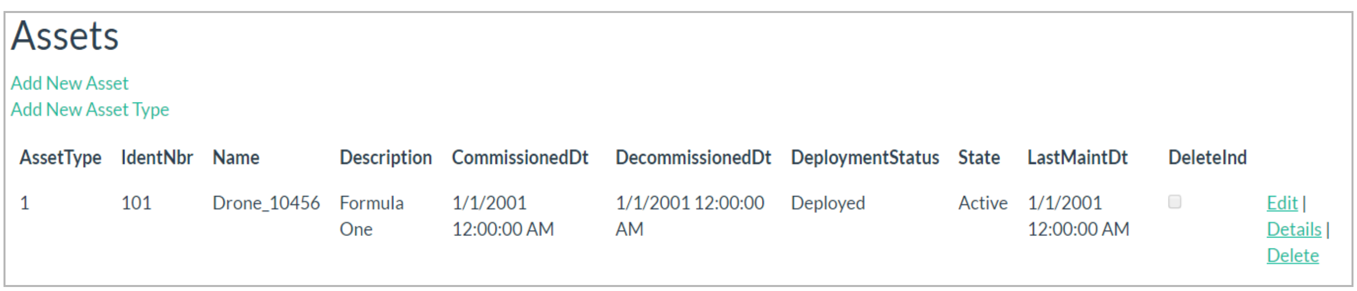
To delete a log file, navigate to the menu symbol found at the far right of a log file on the Log File Index page and select Delete. A window will load, asking for confirmation to delete the log file. Click Delete to delete the client, or "Back to listing" to navigate back to the Log File Index page.

3.5. Filter

The sidebar contains all of the clients; clicking on one of the client will filter the table to contain only the log files from that client. The arrow can be clicked to open up the list of assets under the selected client (the functionality does not fully work currently.) To clear the filter and/or the sorting of the table, simply press the "Clear Filter" button above the table.



4. Managing Assets


Assets

Add New Asset

Add New Asset Type

AssetType	IdentNbr	Name	Description	CommissionedDt	DecommissionedDt	DeploymentStatus	State	LastMaintDt	DeleteInd	
1	101	Drone_10456	Formula One	1/1/2001 12:00:00 AM	1/1/2001 12:00:00 AM	Deployed	Active	1/1/2001 12:00:00 AM		Edit | Details | Delete

4.1. Create

To create a new asset, click on the Add New Asset button at the top of the Asset Index page. Fill out the form, ensure that all required fields are filled out properly, and click Create. The asset will now show up on the Asset Index page.

To create a new asset type, click on the Add New Asset Type button at the top of the Asset Index page. Fill out the form, ensure that all required fields are filled out properly, and click Create. The asset type will now be added as a new category for Asset Type when creating a new asset.

4.2. Details

To view details of an asset, click on the Details link found on the Asset Index page next to the asset you would like further information on.

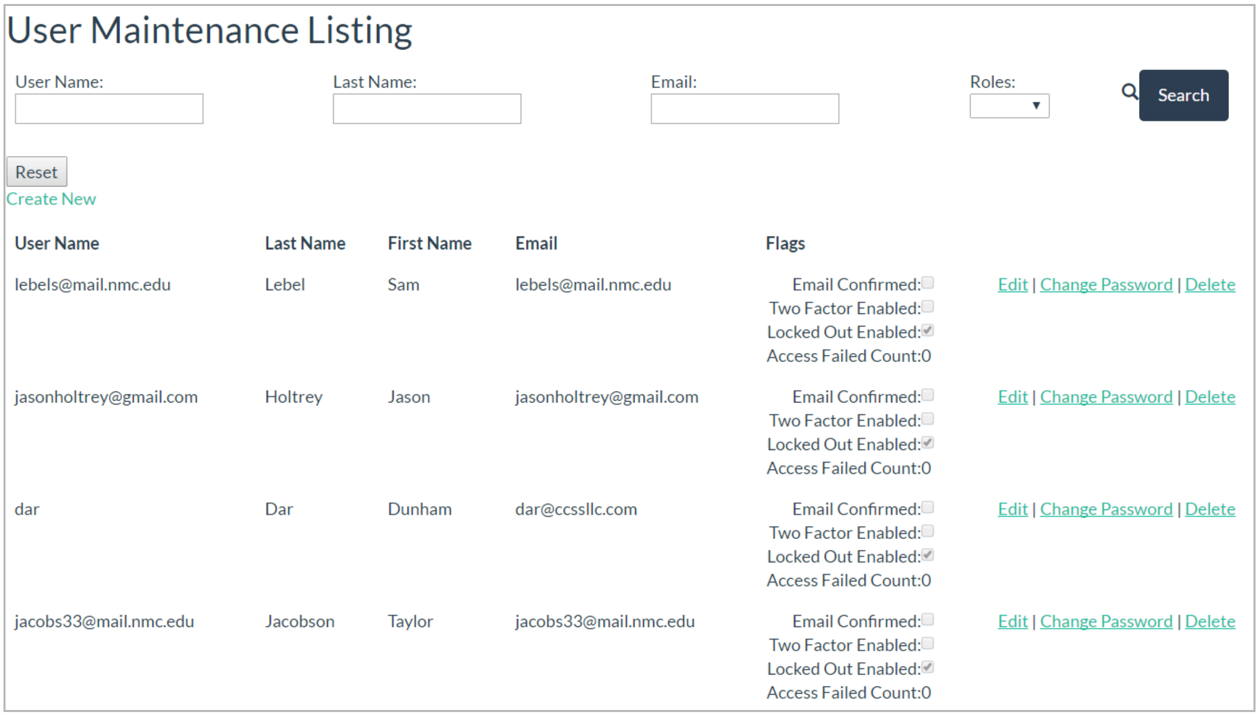
4.3. Edit

To edit an asset, click on the Edit link found on the Asset Index page next to the asset you would like to edit. Once you add, remove, or alter client information, either click Save to save the changes or “Back to list” to discard the changes and navigate back to the Client listing page.

4.4. Delete

To delete an asset, click on the Delete link found on the Asset Index page next to the asset you would like to delete. A window will load, asking for confirmation to delete the asset. Click Delete to delete the asset, or “Back to listing” to navigate back to the Asset Index page.

5. Managing Users



5.1. Create

To create a new User, click on the Create New button at the top of the Account Index page. Fill out the form, ensure that all required fields are filled out properly, and click Create. The User will now be added to the users listing page and be able to sign in with their email.

5.2. Changing User Password

To change the password for a user, click on the Change Password link next to the desired user at the Account Index page. Enter the new desired password, making sure to meet password requirements, and click Save to save the new password.

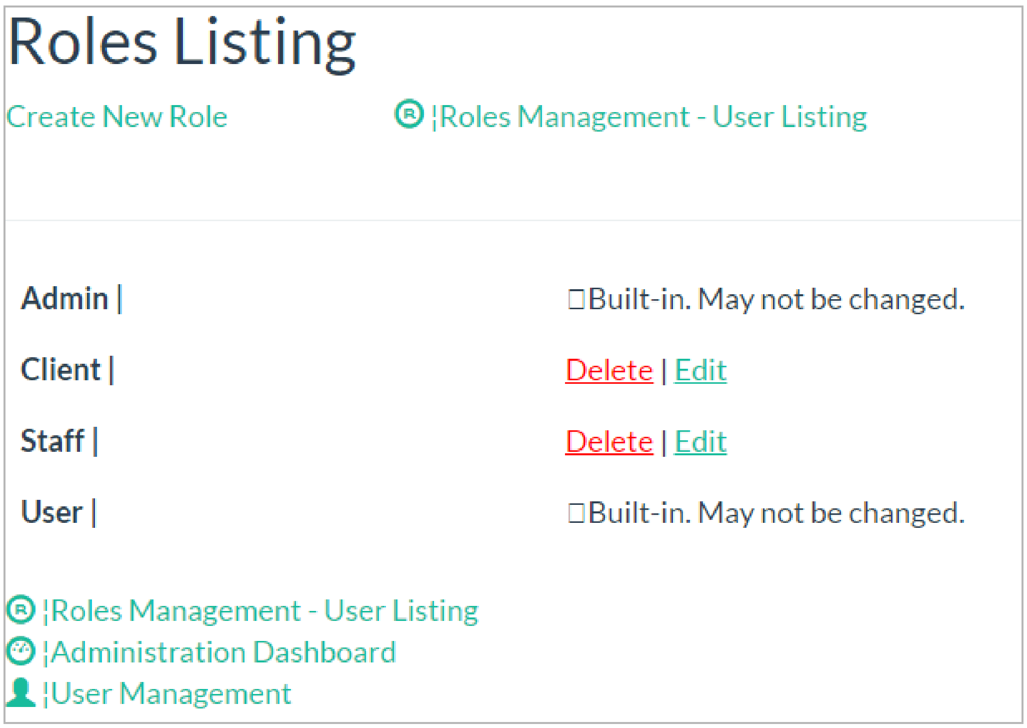
5.3. Edit

To edit a user, click on the Edit link found on the Account Index page next to the user you would like to edit. Once you add, remove, or alter user information, either click Save to save the changes or “Back to list” to discard the changes and navigate back to the Account Index page.

5.4. Delete

To delete a user, click on the Delete link found on the Account Index page next to the user you would like to delete. A window will load, asking for confirmation to delete the user. Click Delete to delete the user, or “Back to listing” to navigate back to the Account Index page.

6. Managing Roles



6.1. Create

To create a new role, click on the Create New Role button at the top of the Roles Index page. Select a name for the role and click save. The role will now appear on the Roles Index page as well as when you’re selecting a role for a user.
(Warning: Creating a new role will do nothing unless enforced in the code.)

6.2. Edit

To edit a role, click on the Edit link found on the Roles Index page next to the role you would like to edit. Currently, all you may edit is the name of the role. When you’re finished click the Save button to save the changes or “Cancel - Back” to discard the changes and navigate back to the Roles Index page.

(Warning: Editing a role's name may break the functionality of the site. You must change the name in code as well.)

6.3. Delete

To delete a role, click on the Delete link found on the Roles Index page next to the role you would like to delete. An alert will popup, asking for confirmation to delete the role. Click OK to delete the role, or cancel to stay on the Account Index page.

6.4. Assigning Roles

On the User Listing page (Roles/UserList) click on the Details link to add or remove roles from a specific user. Click Save to save the role changes or Back To User Listing to discard the changes and navigate back to Roles/UserList.

7. FTP & File Management

7.1. Processing Files

Files that need to be processed will be displayed below the "FTP File Queue" section on the FTP & File Management page. **If no files are being displayed:** There are no files on the FTP Server's File-Logs folder, the application cannot connect to the FTP server, or the FTP Login Credentials are bad. Check the connection information on the configuration page. If that is good, log into the FTP server manually and check the Log-Files folder for logs.

7.2. Configuring FTP Settings

To configure FTP connection settings, navigate to the Configure FTP Connection link on the FTP & File Management page. Enter a hostname (server), username, and password that has permissions to read and write to the FTP server.

7.3. Manually Uploading Files

To manually upload a file to the application, navigate to the FTP & File Management page. There you will see a section titled: "Manual Upload". Choose a file using the "Browse" button. Once a file is selected, press the Upload button.

7.4. Additional Notes

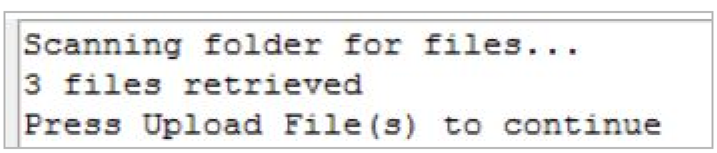
All files are being saved in the same folder. Files with the same name will overwrite one another when being saved or processed.
Log files will default to the first Client ID. These will need to be reassigned as necessary, or a default client will need to be created as ClientID = 1.

8. Uploading Files from controller

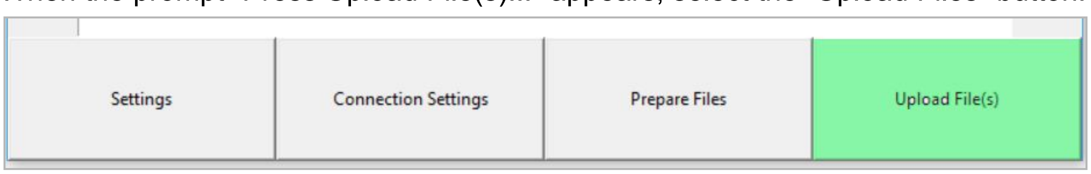
8.1. Upload Process

Prepare the files for upload by selecting the “Prepare Files” button, as shown below:

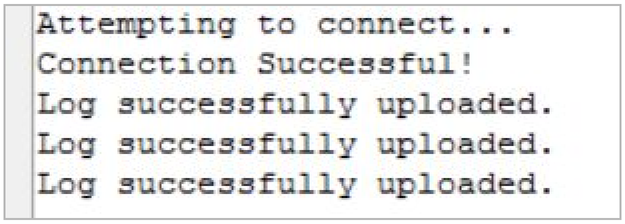
A Response showing the number of files that are ready to upload will be displayed in the text box above.



If no files are available the upload process will not continue.
When the prompt “Press Upload File(s)...” appears, select the “Upload Files” button.



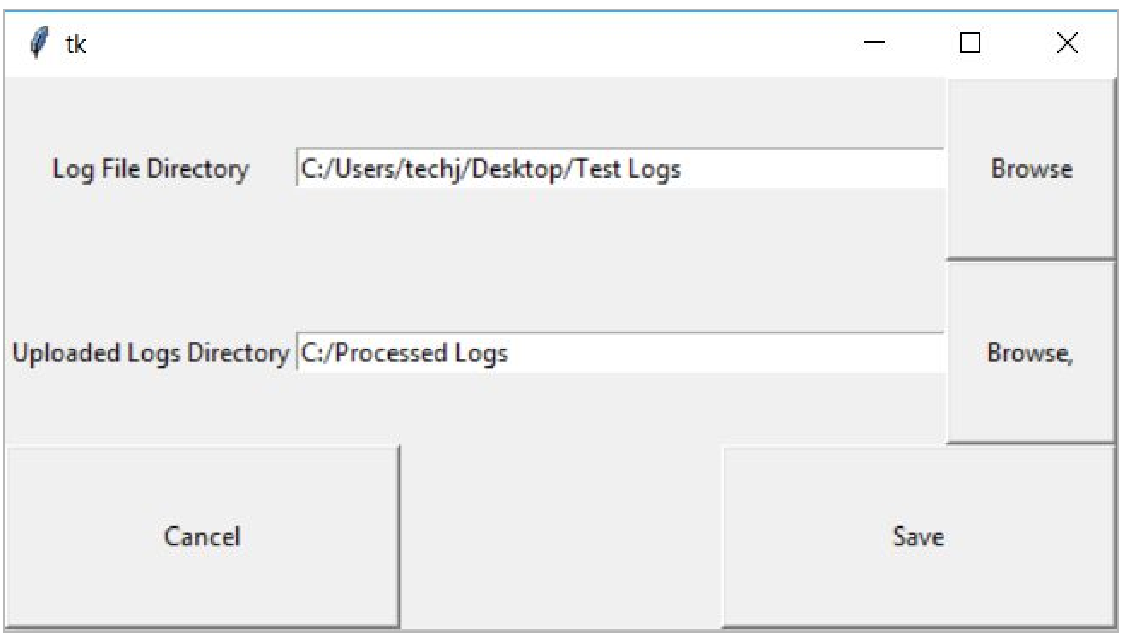
After a succesfull upload the following prompt will be given:



8.2. Changing File Folder Locations

To Change the locations of the stored files, or the processed files first select the settings button:

The following dialog will appear:

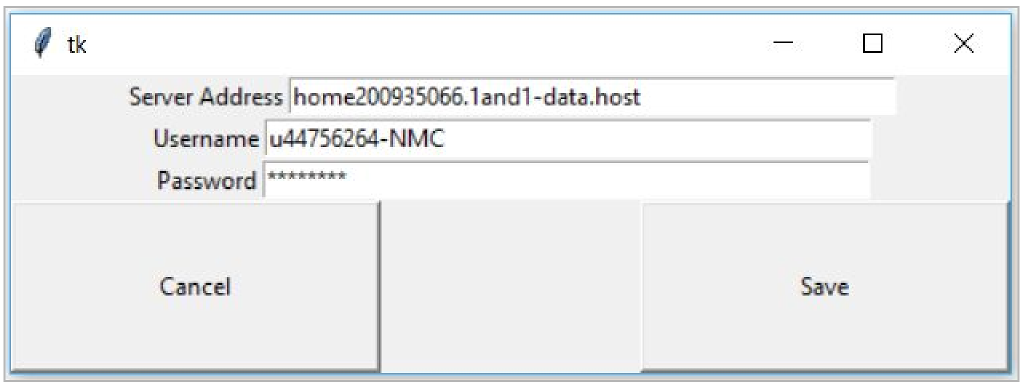


To change the folder location of the stored log files, simply press the browse button. A choose folder dialog will open, then navigate to folder in which the logs are saved. If you wish to change the directory in which the uploaded files are placed, simple choose the browse button next to the “Uploaded Logs Directory.”
Selecting the “Save” button will update the settings file.

8.3. Updating FTP Server Settings

To change the FTP server settings select the “Connection Settings” button:

The following dialog will appear:



Enter the connection settings as shown above and press the save button to update the connection settings file.

8.4. Potential Issues

8.4.1. No Files Detected

If no files are detected, in error, follow the steps outlined in 9.2 to ensure that the proper folder is being scanned.

8.4.2. Server Connection Failed

A connection to the server can fail for numerous reasons.

- Check to make sure the controller is connected to the internet.
- Verify the connection settings as outlined in step 9.3
- Server functionality may be disrupted, contact server administration for issues.