AgStudio

Getting Started

About the Getting Started Guide

This document is intended to help you familiarize yourself with the basics of AgStudio including setting up farms and fields, importing data, and printing maps. Be sure to supplement this guide by accessing the Help as you proceed through this document; the Help provides additional details.

To ensure your ongoing use of AgStudio is successful, we recommend you follow through this guide from start to finish. This gives you a viable setup that makes all other processes flow smoothly.

Contents

Installing AgStudio

System Requirements

- Intel Core 2 Duo or equivalent
- 4 Gb RAM or greater.
- Windows 7, Windows 8, or Windows 10.
- A display screen resolution setting of 1366 x 768 or better (1024 x 768 minimum).
- To view all buttons and report images, set your screen resolution as follows:

  1. Right-click on the desktop
  2. Choose Screen Resolution
  3. Click the link labeled "Make text and other items larger or smaller"
  4. Select "Smaller – 100%"
  5. Click Apply

Installing AgStudio on Windows 7, Windows 8, or Windows 10

1. After clicking the AgStudio installation link, when prompted to Run, Save, or Cancel, click **Save**.
2. In the Save As dialog, select a folder location for saving the file (ex. Desktop).
3. Once the download is complete, open the folder you selected in Step 2, right-click on the saved file, and choose **Run as administrator**.
4. Once the AgStudio Setup wizard appears, click through the installation prompts until reaching the Ready to Install screen:

   - Several prerequisites may be checked for you. Please **don't uncheck** them.
   - Click **Next**.

5. On the 'Ready to Install' screen, click **Install**.
6. On the final screen, place a check next to Launch AgStudio and click **Finish**.

Note: Launching AgStudio for the first time after install may take up to a minute. Please be patient; subsequent starting of the program will be much faster.

Installing Updates

AgStudio provides an efficient and flexible method for managing software updates. If there is an update to your current build, the Auto Update window displays when you launch AgStudio. See Appendix A for details.

Opening a Database

Appendix B provides detailed instructions on how to open your AgStudio database.

Help and Technical Support

Each function (extension) within AgStudio contains function-specific help. This help includes concepts, information about using the extension, and a quick reference "how to" section.

Click [❓ Help] or [❓] to access the help.

If the online help does not provide all the information you need, email agstudiosupport@granular.ag or call 833-933-1733 for technical support.

Grower Picker

To start working with AgStudio, you want to set up your farms and fields. The Company is already established. The Territory and Location are optional subdivisions of Company. If your company requires you to organize your growers by either territory and/or location, then use these selections. In some case, the Territory and Location may be pre-populated. Once a Company, Territory, and Location are established, you can begin adding new growers.

A grower is the collection of the farms, fields, crops, products, etc. that are related to a given farming operation. A crop year is the year for which the crop will be harvested. Before adding farms and fields, you must create at least one Territory, Location and Grower.

To add these items, simply click [...] to the right of each item to access a dialog in which you provide information. In the Territory and Location boxes, enter the name. In the Grower dialog, enter all relevant information about the grower.
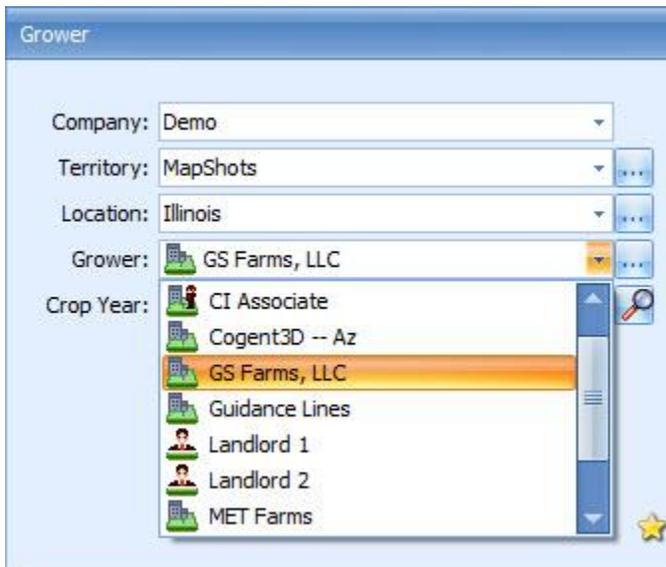
When you create a new grower, the Create Crop Year dialog automatically displays in which you enter the preferred crop year.

Create Crop Year

Enter the new crop year to be created. For a new grower, enter the New Crop Year only.

New Crop Year: [   ]

Mark the check box if you want to copy resource assignments from an existing crop year to the new crop year. Then choose the resources to copy.

☑ Copy Resource Assignments

Enter the crop year from which to copy.

Crop Year To Copy [2018 ▼]
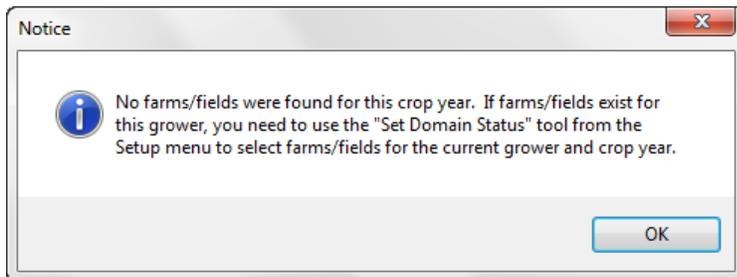
Mark the resources to copy. Related resources are automatically selected.

Resources To Copy:

☑ All Resources

☑ Farms	☑ Commodities
☑ Fields	☑ Seed
☑ Crops	☑ Fertilizers
☑ Entities	☑ Biosolids
☑ Machines	☑ Chemicals
☑ Facilities	☑ Amendments
☑ Tasks	☑ Product Mixes

[✓ OK]   [✗ Cancel]

When creating a new grower, the following message may appear. Click OK and proceed to add farms and fields to your grower.

Notice

ⓘ No farms/fields were found for this crop year. If farms/fields exist for this grower, you need to use the "Set Domain Status" tool from the Setup menu to select farms/fields for the current grower and crop year.

[OK]

To find and manage your growers quickly, click 🔍 to display a Search dialog and enter the grower name. If no farms/fields exist for the grower, a message displays providing instructions on how to proceed.

To save the grower as a Favorite, click ⭐ and then easily select the grower from the **File** | **Favorites** menu.

Initial Setup

Before creating Farms, Fields, and Crop Zones, you need to enter your crops and commodities in the database. It is also a good time to import your logos to print on reports.

Crop Editor

From the Setup menu, select **Crops** to display the Crop Editor in which you add the crops you work with from a pre-defined USDA crop list. In the Crop Editor, be sure to set the Domain to Entire Database and the Crop Year to the crop year in which you want to add crops.

For the crops you added, select the crop in the grid and click **Edit** to provide details including:

- USDA Crop Name

- USDA Crop Type,

- Rates, and

- Growth Stages.

Also, if you choose, design the display style for each crop. This is used most when dealing with adding crop zones, creating setup cards, making variable rate seeding suggestions, importing as-planted operations, and creating reports.

Upon adding and defining the crops to the Entire Database, you want to change the Domain within the Crop Editor to the grower you are defining and to the crop year in which you are working. You would then use the Add function to add these crops to the grower domain.

Note: The Crop Editor works under the assumption that one crop (the item you plant; for example, Corn) can grow many commodities (what you harvest; for example, corn grain or corn silage).

Commodity Editor

From the Setup menu, select **Commodities** to display the Commodity Editor in which you can enter and manage your commodities. In the Commodity Editor, be sure to set the Domain and Crop Year to the grower and crop year in which you are working.

For the commodities you added, select the commodity in the grid and click **Edit** to provide details including:

- Yield Goal

- Inventory, Market and Conversion Units

- Adjustment methods, and

- USDA crop use.

This is used most when dealing with harvest-related items such as the creation of reports based on logged yield data.

Import Images

To import your company logo into the database, from the Setup Menu, select **Logos** to display the **Image Editor** in which you use the Add function to upload your logo image. See Appendix C for more details.

Additional Setup

Should you frequently use additional products and resources, set them up by accessing the editors from the Setup menu. These could include Fertilizers, Seed, Biosolids, Chemicals, Machines, Tasks, and Facilities. Please see the editor-specific Help for additional instruction on setting up these resources.

Building the Resources Tree

The Resources tree contains the Farms, Fields, Crop Zones, layers, and field operations. As you build the Resources tree, you use the crop and commodity data you entered into the database.

Context Menu

For increased efficiency, when you are selected on a domain, right-click to display the context menu that includes the options related to that domain. When building the Resources tree, options such as rename, edit, new, and delete are helpful.

The available create option pertains to the child of that domain. For example, if you are selected on a farm, easily access rename, edit, and delete farm as well as create field (the child domain) from the Context menu. These features are also available by selecting them from the Setup menu.
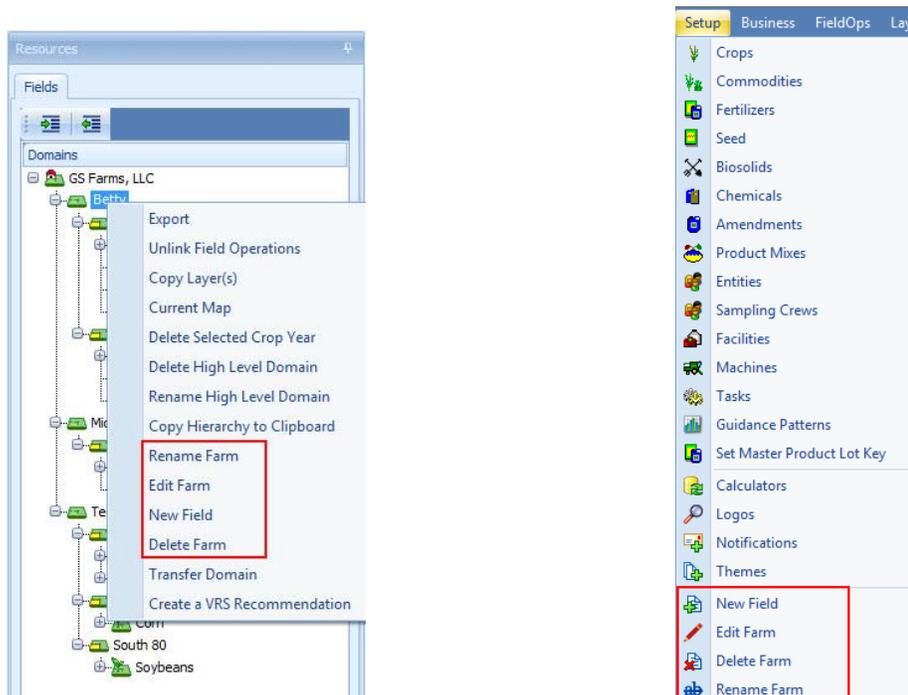
Note: The online Help for creating and editing Growers, Farms, Fields, and Crop Zones is available within the domain specific properties dialogs.

Keep in mind that a grower is the collection of the farms, fields, crops, products, etc. that are related to a given farming operation. Therefore, the Context menu is available for layers and field operations, as well.

Farms

From the Grower level in the Resources tree, when you choose New Farm (either through the Context menu or the Setup menu), the Farm Properties dialog displays. You initially define the farm including County information and a brief description, optional.

Fields

From the Farm level in the Resources tree, when you choose New Field (either through the Context menu or the Setup menu), the Field Properties dialog displays. You define the field including Area, Location (Country, State, County, Political Township, Township, Range, and Section), FSA/NRCS Information, Legal Description, Insurance identification, and Directions.

Crop Zones

From the Field level in the Resources tree, when you choose New CropZone (either through the Context menu or the Setup menu), the Crop Zone Properties dialog displays. You define the crop zone including Crop, Commodity, Sequence, Reported Area, and Yield Goal.
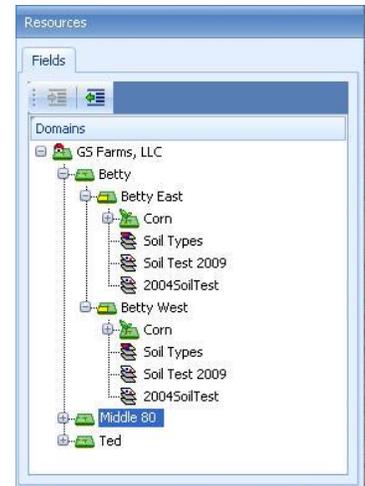
Creating Boundaries

Before you import field operations, you need to establish boundaries. Since field operations are linked to your existing boundaries, starting with accurate boundaries is important.

Importing Boundaries

One method for establishing boundaries is to use the Import Boundaries tool found on the Setup menu. To import shapefile boundaries with Boundary Import, the shapefile field boundaries must contain two attributes:

- FieldName which is the attribute containing the field name, and

- FarmName which is the attribute containing the name of the farm the field belongs to.

If these attributes are present, use the mapping feature to map your other shapefile attributes to attributes in the AgStudio database, then simply upload the files. The Help file for this function guides you through the process of:

- selecting boundary files,

- mapping file contents,

- creating templates, and

- uploading files.

If those attributes are not present, you may import boundaries on a field-by-field basis using the Boundary Editor found on the Map Toolbar. Detailed instructions on how to import boundaries through this extension are found in the Help. In either case, a Soil Types layer will automatically be created for each field boundary imported.

Note: All elements of the shapefile must be present to import the file (i.e. .dbf, .shp, and .shx).

Linking CLU Boundaries

Another method for establishing boundaries is to use the CLU linking tool. From the Setup menu, select CLU and then choose Show CLU boundaries. The boundaries display on the map.

Then from the CLU submenu, select Link CLU boundary. Your cursor becomes a crosshair. Select the boundary that you want to link. Once selected, the Pick Domain dialog appears on which you select the domain to which you want to link the boundary.
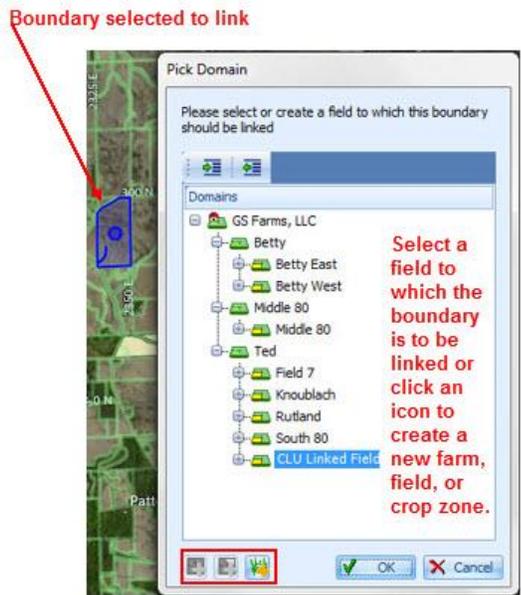
Depending on your selection in the Pick Domain dialog, choose to link to an existing field or create a new field to link the boundary.

The new boundary is linked and a soil type layer is automatically created.

Crop Zone Boundaries

Icons indicate whether there is a difference between the acres in the field boundary and the crop zone boundary. These differences in the acres may occur if the field boundary is changed and the crop zone boundary is not updated to match. In other cases, there are multiple crop zones on a field and not all have been linked to an area of the field boundary. The icons indicate:

- Yellow icon = there are fewer acres assigned to the crop zone(s) than the field or the total crop zone acres are less than the total field acres.

- Red icon = there are more acres assigned to the crop zone than the field or the total crop zone acres are greater than the total field acres

- Green icon = the total crop zone acres equals the total field acres
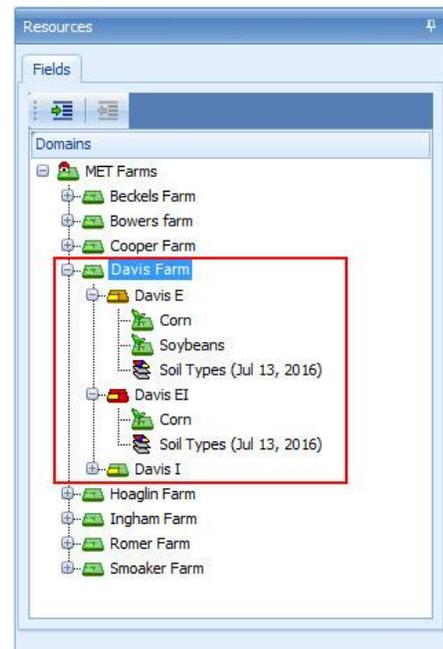
Importing Logged Data

Now that your Resources are setup and your boundaries are created, start importing logged data, such as Harvest, As-applied, and As-planted data.
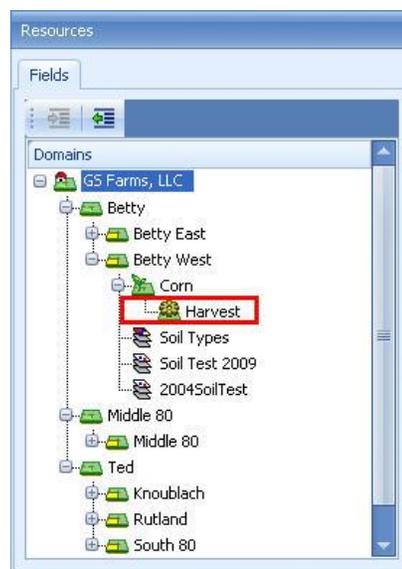
Import FieldOp Cards

From your computer's Start menu, access AgDirector to archive and upload raw data logs from various field devices into AgStudio.

If you don't have AgDirector installed, go to the Product Release page under the Support menu of the MapShots website.

With AgDirector, you have the ability to:

- view the details of each card being read,

- pick-and-choose which files you want to import,

- upload multiple device types from a single card at once, and

- save data to more than one crop year.

In addition, you can work without an internet connection to archive data. A connection is required at the time of actual upload. Once the data is uploaded, it is available for you to view, analyze, and create reports of your data within AgStudio.

FieldOp Viewer

After importing the FieldOp card data, view the newly imported field operations in the Resources tree. If some are not visible, there may be an issue with the boundary or with the data itself. From the FieldOps menu, use the FieldOp Viewer to view linkable and unlinked data. The extension includes several features including the ability to:

- view data in a variety of ways

- delete or transfer operation regions

- query data using various drawing tools

- post calibrate data by weight and/or moisture

The Help explains how to effectively use these features.

FieldOp Resource Linker

If imported data has certain properties such as Task, Crop, Commodity, or Product recorded incorrectly in the monitor, use the FieldOp Resource Linker to link op regions to the correct resources. In addition, information such as Operator or Machine. If data was incorrectly imported into the wrong crop year, use the Transfer to Year option to move the data into the appropriate crop year.

Sampling Work Order

To manage your soil, tissue, and nematode sampling operations from start to finish, use the Sampling Work Order, found on the Fertility menu. Features include the following:

- For new fields that have never been sampled before, use this tool to create a soil/tissue/nematode test layer

- For fields that have been sampled before, use this tool to create a soil/tissue/nematode test layer(s) for a new round of tests by copying the previous soil/tissue/nematode test layer(s)

- Print bag labels to be used to identify the soil/tissue/nematode sample bags

- Print maps and worksheets to assist in the execution of the work order(s)

- Export required files to the field device used for soil/tissue/nematode sampling

- Prepare an order submittal for the soil/tissue/nematode lab

When you send this information to the device, the samples are pulled and sent to the lab for analysis. The lab runs the tests and sends the results to the AgStudio linking service that automatically displays the results in your soil test layers.

Getting Reports

In AgStudio, you can get a simple print of the current map or create a multi-faceted report book of your operation.

Print Current Map

From the File | Print | Current Map menu, select **Print Current Map** to display a preview of the map extent currently displayed in the Map tab (including any zoom or panning you performed). The following features are available:

- export or send the map via email, and

- add background colors or a watermark.

Report Book

From the File | Print menu, select **Report Books** to design a report for your unique requirements. With this function, you give instructions to the application to gather specified data and assemble it into a structured report that you preview, save as a PDF file, or print.

For saved report books, you have the option to run the report on the AgStudio server and receive them as a downloadable PDF via email.

First, select data from the Grower, Farm, Field, and Crop Zone domains, and then choose the exact order in which you want the data to display in the report book. You also control what elements of the map that you want to include such as roads, imagery, and boundaries.
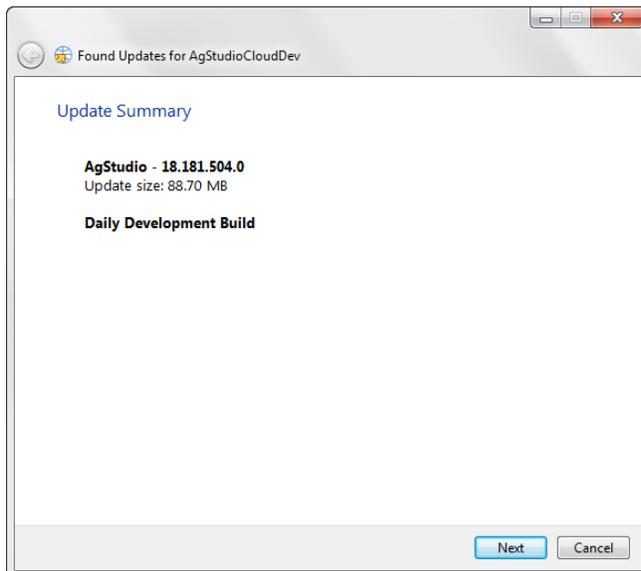
Appendix A: Installing Updates

Auto Update

If there is an update to your current build, the Auto Update window displays when you launch AgStudio.
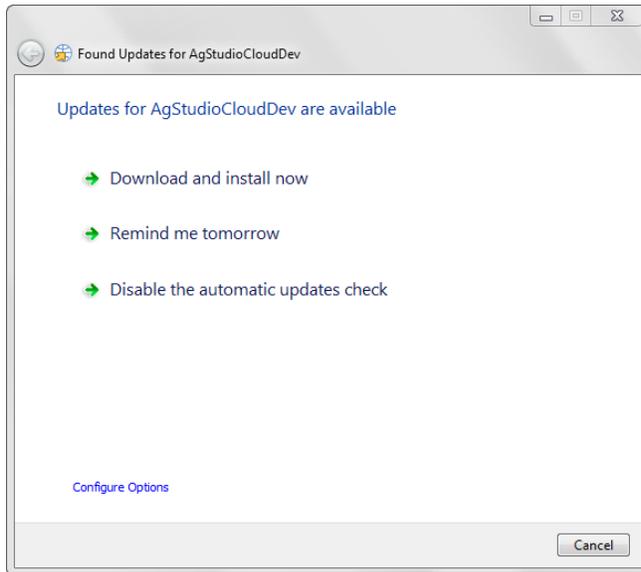
Download and install now

Use this option to immediately initiate the download and installation process for the latest version. The Update Summary dialog displays so you can confirm the update you want to install.
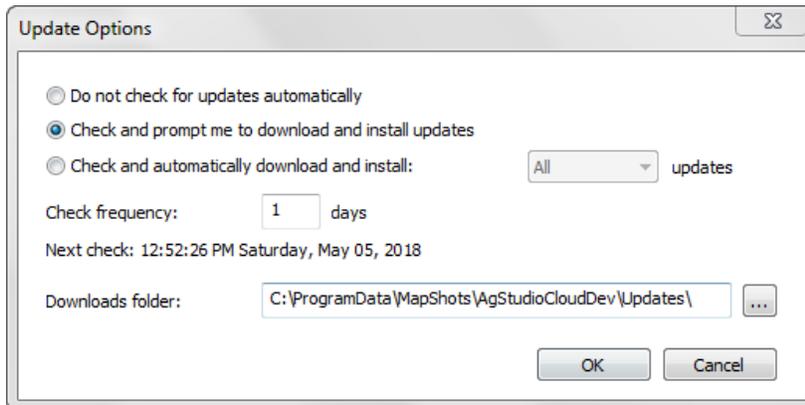

Click **Next** to initiate the standard installation process.

Remind me tomorrow

Use this option to enable the Auto Update window to display 24 hours after you make this selection.

Disable the automatic updates check

If you select this option, the Update Options window displays.

Within this window, you can mark the check box next to the choice you prefer:

Do not check for updates automatically

This option disables the auto update feature. If selected, the "updates," "Check Frequency" and "Next check" entries are disabled.

Should you choose to reactivate this functionality, select **Help** | **Applications Update** | **Configure Automatic Updates** to display the Update Options dialog on which you can activate updates.

Check and prompt me to download and install updates

Choose this option is you want the Auto Update window to display upon starting up AgStudio.

- In the "Check Frequency" box, enter the number of day(s) you want to elapse before checking for updates.

- The "Next check" entry displays the date and time for the next check.

- Use the "Download folder" to accept the default or select a path for the download.

Check and automatically down and install

Choose this option is you want to automatically download and install AgStudio.

- From the "updates" drop down, choose to download and install **All** updates or only **Critical** updates.

- In the "Check Frequency" box, enter the number of day(s) you want to elapse before checking for updates.

- Use the "Download folder" to accept the default or select a path for the download.

Updates from the Help Menu

From the AgStudio Help menu, select:

- **Applications Update** | **Check for Update** to immediately check for updates.

- **Applications Update** | **Configure Automatic Updates** to display the Update Options dialog on which you can activate updates.

Appendix B: Opening Your Database

1. Open AgStudio
2. File | Open
3. In the DSO Picker, choose AgStudio Service DSO on the left
4. Type your specific User ID and Password (Note: The password is case sensitive.)
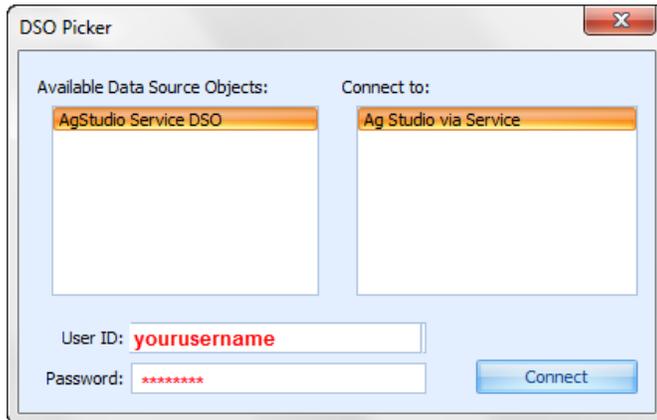
5. Click **Connect**
6. In the Grower panel, use the Grower Picker to create your domains

Appendix C: Logo Specifications

To customize your reports, you can upload your logo into your AgStudio database.

1. Use **Setup** | **Logos** to display the Image Editor.

2. Click Add to display the New Image dialog in which you name the logo (Logo or CoverLogo), browse to the image and select the domain (Company, Territory, Location, Grower) to which you want to associate the logo.

3. You can also use the Image Editor to edit, copy, and remove images.

Logo Specification Parameters

Keep the following parameters in mind when preparing the image file to upload:

Image specifications for *detail* reports

- The recommended aspect ratio is 2.7:1.
- The recommended image size is 270 pixels wide by 103 pixels high.
- Limit the white space around the image.
- When you import, you must name the file "Logo" or it will NOT display on the reports.

Image specifications for *Cover Page* reports:

- The recommended aspect ratio is 1.9:1.
- The recommended image size is 600 pixels wide by 322 pixels high.
- Limit the white space around the image.
- When you import, you must name the file "CoverLogo" or it will NOT display on the cover page reports.