SST Summit®

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Chapter 1: Installing SST Summit and SST Stratus

System Requirements

Requirements for SST Summit

- Intel Pentium or AMD Thunderbird/XP 2 GHz or greater
- 1 GB RAM
- 50+ GB Hard Disk
- CD-ROM
- Windows 2000/XP/Vista/Windows 7

Requirements for SST Stratus

- Handheld Computer with Windows Mobile 2003, 5.0, or 6.0
- Secure Digital (SD) or Compact Flash (CF) card.
- Screen Size of 240 wide by 320 high (or same aspect ratio of 4:3. For instance, 480 x 640 screens are compatible.)
- Compatible with GPS Receivers with NMEA 2.0+ output.

Installation of the Software

Installing SST Summit from the SST Homepage:

- 1. Navigate to the **sstsoftware.com** webpage.
- 2. Select the **Product and Services** menu option.
- 3. Select Summit/Download Free Trial.
- 4. **Fill out the information boxes**, once completed click the **Submit** button.
- 5. The download process will begin, follow the on-screen directions.
- 6. Once the download is complete and you want to purchase, you will need to contact **SST Software** @ **1-888-377-5334** to register the software and receive the Summit Key.

To install SST Summit from a CD:

- 1. Close all programs.
- 2. Place the Summit CD into the CD-ROM drive.
- 3. The application will auto-run.
- 4. Select the **Install SST Summit** option.
- 5. Follow the directions on the screen to complete the installation.

Getting Your Summit Key:

- 1. Open **SST Summit**.
- 2. Select **Home** from the top menu.
- 3. Select **Settings** on the left of the view.
- 4. Select the **SST Summit Kev** tab.
- 5. Email the **Device ID** and **Serial Number** to support@sstsoftware.com.
- 6. An SST Customer Service Representative will reply with your **Summit Key**.

Installing SST Stratus:

- Connect a handheld computer to your PC. You will need to install
 Microsoft ActiveSync (if your OS is XP or previous) in order to establish a
 connection to your handheld. If your OS is Windows 7 or later, you will
 use the Windows Mobile to connect to your handheld.
- 2. Once a connection is established, open **SST Summit**.
- 3. Select **SST Stratus** from the top menu.
- 4. Select **SST Stratus Setup**.
- 5. Follow the directions on the screen to complete the installation.
- 6. Establish a relationship for each Stratus you connect to your Summit.
- 7. Select the **Manage Relationships** tab.
- 8. Follow the instructions on the screen.

Chapter 2: Adding Field Boundaries into SST Summit

Common Field Boundaries (CFB) Tool

To reduce duplication when digitizing new field boundaries, all boundaries that exist within an organization will be visible in the digitizer view when adding new fields. Field boundaries that are already digitized and tied to a Grower, Farm, and Field will appear as blue, fields that are being created are displayed as green, and fields that exist in other Summits within your organization will appear as red. This allows the user to select the already digitized field boundary and will alleviate duplication of these files, thus the name Common Field Boundary tool. This will not fix any existing problems that existed because of these issues from the past; they will still need to be resolved.

To work with the Common Field Boundary Tool

Common Field Boundaries are a boundary or boundaries that exist on one of your company's Summits, but do not exist on yours. The idea is to use that common boundary, without digitizing or driving it again.....so as to keep the same exact field shape between locations.

- When the Digitizer view is zoomed-in to a field area, the existing field boundaries that are on another of your company's Summits, but not on yours will appear in Red. (This only happens if you have contacted SST and had these boundaries shared between your company's Summits......if the boundaries are shared but do not appear, select the Reload Common Field Boundary option).
- 2. Choose the **Select Common Field Boundary** option and click on the field.
- 3. A selection window will appear showing what boundaries exist for that geography. If more than one boundary appears in the view, you'll need to choose the one that will be the final boundary. You do this by choosing the **Hide Common Field Boundary option and turning off the ones that are not needed.** This will load only the one boundary into the view.
- 4. Now choose the **Select Common Field Boundary option** a second time, this time only one boundary map shows up. Choose the **Select** tool with the right-facing arrow.
- 5. The boundary will appear as a green outline indicating that it is in the being created state. Select the **Done** button.
- The Grower-Farm-Field hierarchy will appear. These names can be changed under the Setup/Field Management Setup/Edit Delete Fields, if needed.

To work with the Common Land Unit Tool

- 1. Choose Setup/Field Management Setup/Create New Boundary/Create Boundary using Online Imagery/Enter the City, State and click Next.
- Zoom-in to the area of interest then click the Load Common Land Unit to
 activate it. Click on the field you want to load the common land unit for, if
 available it will appear as a green outline. You may need to edit this to
 model what the actual acres are in the real-world.
- 3. Click the **Done button** and **Add the name of the Grower, Farm, and Field**.

Digitizing Field Boundaries from Online Imagery

Navigate to **Setup/Field Management Setup** to begin the process of digitizing field boundaries.

Digitizing Field Boundaries from Online Imagery

Identify Tool

When using the Digitizer, use the Identify Tool to show what the Grower, Farm, and Field names are of those boundaries within the view.

To digitize a field boundary from online imagery:

- 1. Select **Setup** from the top menu.
- 2. Select Field Management Setup/Create New Boundary and click Next.
- 3. Select Create Boundary Using Online Imagery and click Next.
- 4. Type in the Latitude/Longitude, City/State, PLSS code, or Airport code nearest to the field you want to digitize and select Next. The digitizing screen appears with an aerial image of the location you entered. (Most users will select the City/State option for quick access to their boundaries). SST Summit users from around the world can select the Bing imagery options for their boundary areas.
- 5. Use the Pan button (or right-mouse click and move the image to the desired location) to move to the desired field and use the cursor to zoom in to the field. The image will download to a finer resolution for digitizing. (You may need to select the **Imagery Source** before the image will draw into the view.)
- 6. The **Digitize** feature is automatically selected. Draw a line around the desired field by clicking the mouse button. **Double-click** to close the

- polygon and complete the field boundary. (Click the **Help** button to learn more about each tool.)
- 7. When finished, select **Done**.
- 8. The Add New Field section appears. **Fill out the form** to name the new field in the Grower/Farm/Field structure. Click **Save**.
- 9. The Field Information screen appears. Fill out the form if you want to add more detailed information about the field and select **Save and Exit** or **Save and Digitize Another**, whichever is appropriate.
- 10. To see the field or begin collecting records, select the **Records** button on the top menu. Select the **Grower/Farm/Field** from the right menu and the field boundary will open. *Refer to the Records section (Chapter 6) for more details on recording field information.*

Digitizing Field Boundaries from Saved Imagery

The first step is to import the image into SST Summit to begin the process of being able to digitize boundaries from it. Use the following steps to accomplish this task.

Identify Tool

When using the Digitizer, use the Identify Tool to show what the Grower, Farm, and Field names are of those boundaries within the view.

To Import an image into SST Summit:

- 1. Select **Setup** from the top menu.
- 2. Select **Basedata** and select the **Import Image File** tab.
- Option: Choose Add Field-Specific Imagery if the image you are importing is a single field or choose Add General Imagery if the image covers a large area that encompasses many fields such as a County NAIP image or imagery provided by a third party source.
- Follow the directions on the screen to browse to and import the image.
 When finished, select Done.

To digitize a field boundary from the imported image:

- 1. Select **Setup** from the top menu.
- 2. Select Field Management Setup/Create New Boundary.
- 3. Select Create boundary using imagery in Summit.
- 4. **Select the image you imported** and select **Next**. The image appears in the SST Summit Digitizing Screen.
- 5. The **Digitize** tool is automatically selected. Draw a line around the desired field by left-mouse clicking the mouse button. **Double-click** to close the polygon and complete the field boundary. Click the **Help** button to learn more about each tool.
- 6. When finished, select **Next**.

- 7. The Add Fields section appears. **Fill out the form** to name the new field in the Grower/Farm/Field structure. Click **Save**.
- 8. The Field Information screen appears. Fill out the form if you want to add more detailed information about the field and select **Save** and **Done**.
- 9. To see the field or begin collecting records, select the **Records** button on the top menu. Select the **Grower/Farm/Field** from the right menu and the field boundary will open.

Adding Field Boundaries from Existing Shapefiles

- Clipped-Out Fields Displayed: When an imported field SHP is fully inside an existing field a message will notify the user that the imported file is completely contained within an existing field and cannot be imported. The user will then see a graphic of both the existing and new boundaries and can use the Field Identification tool to determine the name of the existing field.
- Editing One SHP with another: After loading a new field SHP into the digitizer, a user can browse to a second SHP to edit the first. When the second file is loaded the user will be asked if they would like to add or remove the area of the second file to/from the first.
- 1. Select **Setup** from the top menu.
- 2. Select Field Management Setup/Add field by browsing to existing shapefile and select Next.
- 3. **Browse to the shapefile** stored on your hard drive and select **Next**.
- 4. The field boundary will appear as a green outline in the view, in the top right-hand corner select your **Imagery Source** to use to validate the boundary file.
- 5. Verify the boundary as needed and use the edit boundary tools to correct any errors. When finished, click **Next.**
- 6. The Add Fields section appears. **Fill out the form** to name the new field in the Grower/Farm/Field structure. Click **Save**.
- 7. The Field Information screen appears. Fill out the form if you want to add more detailed information about the field and select **Save** and **Done**.
- 8. To see the field or begin collecting records, select the **Records** button on the top menu. Select the **Grower/Farm/Field** from the right menu and the field boundary will open.

Digitize Fields from Holding Tank data

When yield data are imported into SST Summit and a field boundary does not exist for some of the yield files coming in, you have the ability to digitize a field boundary from the holding tank before continuing.

- 1. Select Data Mgmt./Import Data/Harvest/Import from Holding Tank.
- 2. Select the yield file to begin with by right-mouse clicking on it and choosing the option to **Digitize Field Boundary**.
- 3. Choose the Imagery Source that is appropriate.
- 4. Using the **Zoom-In** tool, pull a box around the yield data (they will be the red points appearing in the view) to zoom in around the field extent to use.
- 5. The field area will appear in the view ready to be digitized. Use the **Digitize tool** to begin clicking where you want to drop vertices outlining the boundary outline. Double-click when finished, click the **Done** button and name the Grower/Farm/Field as needed.

Digitizing Center Pivot Field Boundaries

- 1. Navigate to Setup/Field Management Setup/Create New Boundary/Create Boundary using Online Imagery.
- 2. Type in the City/State and click **Next.**
- 3. Select the Imagery Source to use, if it isn't already. (*Note: if within the United States use the NAIP option; if not, choose the Bing option for areas outside of the U.S.*)
- 4. Choose the Zoom-In tool and drag a box around the field of choice. (*The imagery will download to a higher resolution image for digitizing purposes*.)
- 5. Click the Center Pivot Tool option to activate the Center Pivot Tool, move into the image view and left mouse click to begin dragging a circle out to match the pivot area. (Don't let go of the left-mouse button until you get the size of circle you need).
- 6. To drag the circle around the view, keep holding down the left-mouse button and hold the **Control key**. This will allow you to move the circle to fit on the image wherever you might need it to be placed. Once you get the circle tool set where you want it, let go of the left-mouse button. This will create the circle around the pivot area. (If all you have are the pivot acres for this field, then you're done and ready to hit Next to create the Grower-Farm-Field hierarchy. If you need the dry-land corners digitized then go to the next step.)
- Activate the **Digitize tool** by selecting it. **Now move into the view** and begin by clicking inside the pivot by one of the corners, then continue

around the dry-land areas of the field and double-click when you're finished. This will attach the non-pivot acres to the pivot acres for the entire field boundary, but they'll be separated by the zones defining the field boundary. (This can be used as a management zone when recording inputs on the field, whereas inputs might be different from what's under the pivot as compared to the acres in dry-land.) Once this is completed, click the **Done** button and name the Grower-Farm-Field hierarchy to complete the process.

Editing an Existing Field Boundary

Over time a field boundary may change and need to be edited to reflect the acreage difference. You should always *Edit* an existing boundary; don't redrive or re-digitize a new one as this will limit the user extensively on what information they can ascertain from these data over time and space. To edit a field boundary use the following steps.

- 1. Navigate to Setup/Field Management Setup/Edit/Delete Fields.
- 2. In the next window select the Grower-Farm-Field to edit and select the **Edit Boundary** button. If you don't have Field-Specific Imagery or General Imagery just select the **Next** button to continue. By clicking next you have the option to select the imagery source to use to stream in live such as NAIP (if within the U.S.) or Bing (if outside the U.S.)
- 3. Select the tools needed to make the edits to the boundary and continue.
- 4. The tools you will most often use are the:
 - 1. **Edit Vertices**: with this tool you can select a vertex, (a point) and move it to a new location.
 - 2. **Add Vertices**: with this tool click anywhere on the field boundary outline and new vertex appears.
 - 3. **Split Polygons**: with this tool you can split off areas of the field then select the Clear Selected Features to delete these areas, you must begin outside and finish outside of the area being split.
 - 4. **Edit with Shapefile**: this tool will allow you to load a shapefile, such as a driven boundary using GPS, to overwrite the field that is currently in the system.
- 5. When finished select the **Done** button. A window will appear explaining that editing a boundary will result in all previously collected management zones being deleted. Select **Yes** and continue. All your saved data is fine; all Operations for all years are still available, just the management zones were deleted.

Editing Fields using the Combine Fields Option

When editing a field boundary using the Combine Fields option found under **Setup/Field Management Setup/Combine Fields**, you have two choices. Users can choose; 1) to only show Fields that intersect, or 2) show fields that intersect or are within a distance of.

This filter is a global setting, so once applied all Growers that have fields that fall within that filter distance will show up in the lists. If a change is applied from this view, then the filter will need to be reapplied to show all the Grower's fields a second time.

Management Zones

Always digitize or drive the boundary to the largest extent of the cultivated and managed acres to define the field boundary. This defines the number of acres managed within that field by that farmer/grower. Sub-field areas that are managed independently of one another are called Management Zones. For example, an 80-acre field that has been split with corn on one half and beans on the other could still be managed as one 80-acre field with two Management Zones for that crop within that season. A field boundary may or may not change over time but, the different inputs over that same period of time definitely will. These areas are what SST defines as management zones. In our system a user can have as many management zones as needed to model real-world inputs and management practices.

Creating Management Zones

Management zones in SST Summit are created in either the Records or the Maps sections or in real-time using DGPS and SST Stratus, in the field.

From the Records Section:

- 1. Select **Records** from the top menu.
- 2. Navigate to the Grower, Farm, Field desired.
- 3. Select the **Split** tool from the toolbar. Draw a line or polygon and double-click to make the split. (*The measure tools can be used to drop markers where a field split needs to be made, and then use the Split tool to complete the actual split.)*
- Select Save on the bottom left of the screen and name the file management zone or something that reflects what happened at the time of creation. Examples might be crop zones 2009, corn/beans 2008, or corn 2010.
- 5. The **Load Management Zone tool** can now be used to load what management zone is appropriate for the data to be recorded within the Records section.

6. Notice that you can only have one at a time saved as the default but, you can activate any of these and **Load** them into the field area view.

From the Maps Section:

- 1. Select **Maps** from the top menu.
- 2. **Turn on the layer of data** that you want to create a management zone from by placing a check mark in the box to the left of the name of that layer. Also, **click on the background of that layer** or the legend, it will turn dark gray. (Only polygon layers can be converted to management zones).
- 3. Click on the **Management Zone button** on the menu bar. It is the multicolored icon in a square shape.
- 4. This will open the Management Zone tool Editor. This gives the user the ability to create further splits, union multiple zones into one zone, measure out how they want to make the splits, etc. Use these tools to create the needed management zone.
- 5. Select the **Save** button and name this by typing in an appropriate name for that management zone. You also have the option to save the management zone to either specific crop seasons or all crop seasons.
- 6. Now, when you place a FarmRite Order or record Records in SST Summit you can use these management zones to drive what is to be ordered upon within these field boundaries. For example, placing an order on corn acres versus bean acres within the same field boundary allows you to utilize this tool.

Using SST Stratus and Real-Time GPS:

In SST Stratus, management zones are created using the split tools.

- 1. Open SST Stratus.
- 2. Select the Grower/Farm/Field.
- 3. Select the **Map** tab.
- 4. Choose Tools/Create Management Zone
- 5. To split a section of a field, select the **Split** tool and tap to draw a line across a boundary. Select the **Split** tool again to make the split. By turning on your GPS icon, you can select this tool and drive and split the field in real-time and save this as a management zone. Note: to split a field or polygon, start outside the zone to be split, activate the tool and drive to the other side where the split needs to end, and then select the tool a second time to stop the split.
- 6. To create an interior split, select the **Interior Polygon** tool. Draw a polygon inside the field boundary and select the **Interior Polygon** tool again to complete it. By turning on your GPS icon, you can select this tool and drive and create the interior split in real-time and save this as a management zone.

7.	Select File/Save and name the management zone.

Chapter 3: Creating a SyncNow Account

SyncNow is a free service that allows you to do several things; 1) synchronize data with other SST Summit users, 2) automatically backup and store your data on the SST FarmRite server, and, 3) download free soil type data (only available to U.S. customers). It is also the data delivery system for FarmRite customers.

To Create a SyncNow Account:

- 1. Select **Setup** from the top menu.
- 2. Select SyncNow/SyncNow Setup and click Next.
- 3. Select the **Create SyncNow Account** button.
- 4. **Fill out the form**. A confirmation email will be sent to you.
- 5. You will need to validate your account by clicking on the link in the email.
- 6. Select the **SyncNow button** to finish the setup process.

Setting up a Relationship with another SST Summit

- The 4-digit SyncNow Group Number is listed in the middle of the Home page. You will need to know the SyncNow Group Number of the other Summit(s) you are creating a relationship with.
- 2. Select **Setup** from the top menu.
- 3. Select SyncNow / Create New Relationship
- Enter the SyncNow Group Number of the SST Summit you wish to share data with.
- 5. Take the defaults in the following page; this will allow each person to be their own administrator of their data. The administrator decides which operations can be shared.
- Choose the appropriate options for sharing the various operations between these Summits. Click the Don't Share option as needed.
- Choose the Growers/Farms/Fields to share with the receiving SST Summit.
- 8. Select **Done**.
- 9. When the receiving Summit is synchronized, the user will see a dialog box that asks if they want to Accept or Reject this relationship. They will need to select the **Accept** option, and then click the **Reciprocate** option if they intend to share the same operations and fields back with you.

SyncNow Timer

Users can set up SyncNow timers to run SyncNow at designed times, even if SST Summit is sitting idle or completely closed. This automates making a backup onto the SST FarmRite server from the desktop SST Summit program running on your local computer.

1. Choose Home/Settings/SyncNow Timer.

Note: Once a relationship has been created, all newly added boundaries can be shared in SyncNow relationships.

Note: It typically takes three SyncNow clicks per SST Summit to finalize data sharing through a SyncNow relationship. Both SST Summits must sync once to initiate the relationship. Then they must sync each time to upload data to the FarmRite server and sync to download from the FarmRite server.

Chapter 4: Importing & Managing Data in SST Summit

Importing Soil Type Data

Downloading Soil Type Data:

 Navigate to Setup/Basedata/Download Soil Data. Choose the Grower, Farm, Field and if you are in Iowa, you may want to take the ISPAID option. All other states will use the SSURGO database, which is the default.

Using Online Imagery to Create the Field Boundary:

1. When digitizing a field boundary from online imagery, the soil type maps are downloaded automatically once the boundary has been digitized and added with a Grower, Farm, and Field name. The same applies if you had added the boundary as a shapefile.

Adding the Boundary as a .sst package or a SyncNow Relationship

Once your boundary or boundaries have been entered into your SST Summit follow these steps:

- 1. Sync the Field(s) to your FarmRite account.
- 2. Choose Setup/Basedata/Download Soil Data.
- 3. Select the Grower, Farm, and Field and which option for the soils resource.
- 4. Select the Download Selected.
- 5. Navigate to the Maps view and the soils layer will appear in Layers

Note: You can convert soil type maps into images and/or management zones in the Maps view. These, in turn, can be used in SST Summit or sent down to SST Stratus for use in soil sampling, field scouting, etc.

Importing Soil Lab Results

There are two methods to get your results file back from the soil test lab. First is the automated method which is explained in more detail in the following paragraphs. A second method is to build the lab import, which will be used each time to import the results into each individual field.

1) Directly Importing Soil Test Results from Lab Several leading soil test labs have implemented a programming interface that allows them to directly attach soil test results to the SST FarmRite server, minimizing the need for you to receive soil test result emails and manually import each file. Visit www.sstsoftware.com/summit_dataformats.htm to view the current list of labs that offer this service.

- 1. Import the soil test points from SST Stratus. (See SST Stratus Chapter)
- 2. Select **Reports** from the top menu.
- 3. Select **Record Reports.**
- 4. Select the appropriate Grower, Farm, and Field/s.
- 5. Select Soil Sampling Reports/Barcode Report.
- 6. Click the **Preview** button to open a .pdf barcode report the soil test lab will
- 7. **Print** 1-page for each field and include it with the soil samples that are delivered to the soil test lab.
- 8. When the lab is finished, click the **SyncNow** button to import the results into your SST Summit.

Users can place a FarmRite order with their agronomic tasks without the results being completed. These orders will appear as delayed until the soil test lab sends the results to the Client's SyncNow account, in which case, the order is re-qued on the FarmRite server and the processing is completed.

2a) Building the Soil Lab Format

- 1. Select **Data Management** (**Data Mgmt.**) from the top menu.
- 2. Select the **Import Data** tab.
- 3. Select **Soil Test** (**Results**) from the Type of Data pick list.
- 4. Under the Format option, choose **Manage Import Formats**.
- 5. Select the **Create New** button.
- 6. **Browse** to a file that contains your soil test lab results.
- 7. Select the **Delimiter Type**.
- 8. Match each column header to the appropriate header such as: match Sampling ID to the id column or Soil pH to the ph column.
- 9. When finished, click **Save**.

2b) Importing Soil Test Results

- 1. Select Data Management (Data Mgmt.) from the top menu.
- 2. Select the **Import Data** tab.
- 3. Select **Soil Test (Results)** from the Type of Data pick list.
- 4. Under the Format option, select the **appropriate lab format**.
- 5. **Browse** to the file that contains your soil test lab results.
- 6. Open up the **Grower/Farm/Field** to the **Soil Sampling** operation.
- 7. Match the Grower's Field to the correct lab file for each individual field boundary.
- 8. Click the **Import** button each time, per field boundary, to import in that specific Field's lab results.
- 9. When finished, select the **Done** button.

- 3) Importing Soil Test Lab Recommendation
 - When creating a soil test lab format the user will set columns for "P205 Rec, "K20 Rec, etc. that will be matched to the labs file.
 - 2) Recommendations must be 100% nutrient recommendations, not product recommendations.

Importing Soil Test Shapefile

- 1. Select **Data Management** (**Data Mgmt.**) from the top menu.
- 2. Select the **Import Data** tab.
- 3. Select **Soil Test** (**Spatial**) from the Type of Data pick list.
- 4. Under the Format option, select **Shapefile**.
- Click Browse and navigate to the location where these shapefiles are located.
- 6. **Select all the shapefiles** you need to import and select **Next**.
- 7. The next view will show all the fields that intersect the selected point shapefiles.
- 8. **Choose** the files you want to import by filling out all the items in red.
- 9. Select Next.

Exporting Recommendation Controller Files

- 1. Select **Data Mgmt.**
- 2. Export Data.
- 3. Select the **Export Recommendations** tab.
- 4. Select the data types such as **Commercial Fertilizer.**
- Choose the Controller Company, Controller Software, and Type in the bottom center of the screen.
- 6. Select the **Recommendations to Export** and click **Next**.
- 7. Select the **file naming format**, the **export location**, and any custom text (this is optional).
- 8. Select the **Export button** to complete the process.

Importing Yield Data

- 1. Select **Data Management** (**Data Mgmt.**) from the top menu.
- 2. Select **Import Data**
- 3. From the **Type of Data** list, select **Harvest**.
- 4. Choose the **Format**.
- 5. **Browse** to the folder where these raw yield data files are stored.
- 6. **Select the files** you wish to import.
- 7. Click the **Next** button
- 8. **Fill out the Red Text boxes** in the following pages.

- 9. When asked to fill out the Crop Season, in the lower right hand corner of the view is the Crop Settings button. Select this and choose your Summit Crop, Crop Season, either the Manual or Auto Calculate option, other properties options, and whether to Save as default and/or Override settings assigned at Field. Click the Save button and Close.
- 10. Click the **Next** button
- 11. Choose to do a **Manual Import** and click **Next**. The Batch Import option can be used if you don't question the spatial accuracy of the yield data. Unless you trust this to be true, it would be more efficient to do a Manual Import.
- 12. If all the points (in blue) intersect the field, click the **Next** button and continue. If not, select the **Split** tool and **Select Intersecting Points**.
- 13. Click Next.
- 14. Click the **Finish** button when all the yield files have been read.
- 15. When Summit has completed processing, click **OK**.
- 16. To view yield data, open the **Maps** section and navigate to the field. (Refer to the Maps Chapter)

Note: Yield Reports can be created by navigating to Reports/Record Reports/Harvest Reports/Yield. There are several options available for reporting the information.

Importing As-Applied Data

- 1. Select **Data Management** from the top menu.
- 2. Select **Import Data** and for the Type of Data, choose **As-Applied**.
- 3. Select the correct Format to use and click the **Browse button** to select the needed files to import and select **Next.**
- 4. Fill out the needed information and **choose the correct Season**.
- 5. Select **Next and click the Edit button** to make any changes as needed. When everything is complete select the **Next** button.
- 6. All the fields that intersect these data will be shown in the view with the **Import** option pre-selected. **Click the Next button** to continue.
- 7. If no intersecting fields were found for the as-applied data, then you have the option to **Digitize** the boundary around the points that were collected. Select Done when finished and fill out the Grower/Farm/Field information.
- 8. Select the **Finish button** to complete the process.

Note: Navigate to the Maps view to view these data and create a quick map of the dataset. You can also select Reports and either Planting or Fertilizer Reports to create

Importing Tissue Sampling

- 1. Select **Data Management** from the top menu.
- 2. Select **Import Data** and for the Type of Data, choose **Tissue (Results).**
- 3. Select the correct Format to use and click the **Browse button** to select the needed files to import.

Importing Nematode Sampling

- 1. Select **Data Management** from the top menu.
- 2. Select **Import Data** and for the Type of Data, choose **Nematodes** (**Results**).
- 3. Select the correct Format to use and click the **Browse button** to select the needed files to import.

Importing Veris® EC Data

- 1. Select **Data Mgmt.** from the top menu.
- 2. Select Import Data and for the type of data choose EC data.
- 3. **Browse** to and **select** the .dat files.
- 4. For the **Select an Import Option**, choose **Import points to this field**.
- 5. Fill in the **Crop Season.**
- 6. Fill in a **Saved Name.** (This is optional)
- 7. Choose the **Event Date** for when this data was collected.
- 8. Click the **Next** button.
- 9. To view this data, navigate to the appropriate field in the Maps section. (Refer to the Maps Chapter)

Importing .sst Packages

A .sst package is a set of files that one SST Summit user can send to another SST Summit user for transferring data when no SyncNow Relationship exists between users. However, a SyncNow Relationship is a more efficient and seamless way to share data with other Summit users if you have an established relationship.

To import a .sst package:

- 1. Select **Data Mgmt.** from the top menu.
- 2. Browse to the .sst file.
- 3. Follow directions and click **Next** through the wizard.

To export a .sst package:

- 1. Select **Data Mgmt.** from the top menu.
- Select Export Data and choose the types of data to send to another SST Summit.
- 3. Click the **Next** button.

- 4. Choose the specific **Growers/Farms/Field** and data to be packaged.
- 5. Click the **Create Package** button.
- 6. Name and Save the file on your hard drive.
- 7. The .sst package can now be emailed to another Summit user.

To export a Shapefile from SST Summit:

- 1. Select Data Mgmt./Export Data/Place a check-mark in the boxes next to the items required and click Next.
- 2. If a Field boundary is desired, (as a shapefile) open to the boundary of choice and right-mouse click.
- 3. Choose Export Single Shapefile.
- 4. For other items such as soil test points, management zones, nutrient recommendations, etc. the same steps are followed, just open to that level of the item needed to be exported and follow steps 1-3.

Deleting Data

To delete Yield Data:

- 1. Select **Data Mgmt.** from the top menu.
- 2. Select Delete Data.
- 3. Select **Delete Yield.**
- 4. Choose the files to delete and click the **Delete** button.

To delete Operations:

- 1. Select **Data Mgmt**. from the top menu.
- 2. Select **Delete Data**.
- 3. Check-mark the operations you wish to delete.
- 4. Select **Delete Checked Items.**

Note: This only deletes out Operations or data layers not the field boundaries. To delete out a Field Boundary go to Setup/Field Management Setup/Edit/Delete Fields to make those selections. This is outlined in the following steps.

Deleting Growers, Farms, or Fields

To delete a Grower, Farm, or Field:

Note: This will delete ALL saved data for the selected Grower, farm, or field and remove the Grower, farm, or field and all associated data from any SyncNow Relationship.

- 1. Select **Setup** from the top menu.
- 2. Select **Field Management Setup**.
- 3. Select **Edit/Delete Fields**.
- 4. Select the **Grower**, **Farm**, **or Field** you wish to delete.

5. Choose the **Delete Selected Item** button.

Renaming a Grower, Farm, or Field.

To rename a Grower, Farm, or Field:

- 1. Select **Setup** from the top menu.
- 2. Select Field Management Setup.
- 3. Select Edit/Delete Fields.
- 4. **Select the Grower, Farm, or Field** you wish to rename.
- 5. Choose the **Rename** button.
- 6. Type in new name and select **Enter**.

Moving Farms and Fields

To move a field to another farm, or to move a farm to a different Grower:

- 1. Select **Setup** from the top menu.
- 2. Select **Field Management Setup**.
- 3. Select Move Farms/Field.
- 4. Select the **Grower/Farm/Field** you wish to move.
- Select the Grower/Farm/Field you wish to move your previous selection to.
- 6. Click the **Move** button.

Note: All relevant data that belongs to that field will move along with the field boundary to the new location.

Combine Fields

- 1. Select **Setup** from the top menu.
- 2. Select Field Management Setup.
- 3. Select Combine Fields.
- 4. **Choose Field 1** from the left-hand side, (this will be your final boundary) and the **field you want to combine from Field 2** from the right-hand side dropdown list. *Once this is complete, field 2 will be combined into Field 1 as the final result......and all data belonging to field 2 will be moved into your field 1 choice.*

Grower Labels

- 1. Navigate to Setup/Field Management Setup/Grower Labels.
- 2. Select the New Label button and enter the name.
- 3. Select this Label and select Growers to Assign to Label.
- 4. In the Records or Maps view, select the Filter button (looks like a funnel on the right top side of the view) and you can filter by All Growers (that you select) or

Shared Growers that belong across two different Labels. Example of Labels might be Salepeople, Business Units, Retail Locations, etc.

Deleting Imagery

To delete imagery:

- 1. Select **Setup** from the top menu.
- 2. Select **Basedata**.
- 3. Select **Manage Images** tab.
- 4. Select the Grower, Farm, Field, and image you wish to delete.5. Select the Delete Checked Items button.

Chapter 5: Creating Crop Plans and Cost Groups

The Plans section is only available in SST Summit Plus or SST Summit Professional. The Plans section allows you to create and spatially apply plans to a farm or individual fields in order to compare various crop input scenarios. These scenarios can then be converted into recommendations and/or actual records.

To Create a Crop Plan;

- 1. Select **Plans** from the top menu.
- 2. Select Create and Manage Plans.
- 3. Select an **Operation** and select the **Add** button at the bottom of the screen.
- 4. **Fill out** the pick list and select **Save**.
- 5. Repeat steps 3 and 4 for each operation you wish to add to the Current Plan.
- 6. When finished filling out the operations, close the pick list.
- 7. **Select an operation** and **click the right arrow** in the middle of the screen to add that operation to the Current Plan.
- 8. Repeat Step 7 for each operation you wish to add to the Current Plan.
- 9. When the Current Plan is complete, click **Save** and assign a name that identifies the plan.
- 10. Select **Done**.

To Apply Plans to Fields (Creating Scenarios);

- 1. Select **Plans** from the top menu.
- 2. Select View/Apply Plans.
- 3. On the right side of the screen, **select the Grower, Farm, or Field** to which you will apply a plan.
- 4. On the bottom left of the screen, **select the Plan** you wish to apply.
- 5. Click on the fields or management zones to apply the plan.
- The fields or zones will be highlighted and the Applied Plan will be listed on the top left of the screen. These will be color-coded according to the plan used.
- 7. When finished, select **Save** at the bottom left of the screen.
- 8. **Enter a name** for the Scenario.
- 9. If you intend to associate costs with the scenario, select the **Season**.
- 10. Select a **Cost Group** from the following drop-down lists.
- 11. When finished, select **Save** and **OK**.

Creating Cost Groups

Cost groups allow you to compare input costs across an entire farming operation or within just one field. Cost groups can be categorized in several ways, 1) based on a time/date of payment, 2) based upon different retail locations regarding product costs, and 3) based upon what can be saved if paid in pre-season vs. in-season price lists.

- 1. Select **Setup** from the top menu.
- 2. Select **Input Cost Setup**.
- 3. You can assign costs under the following 4 tabs: Inputs, Operational, Fixed, and Service.
- 4. The **Inputs** tab is selected by default.
- 5. Select the **Crop Season**.
- 6. In the Cost Group list, select **New**.
- 7. Enter a descriptive **Name** and click **OK**.
- 8. Select the appropriate category tab.
- 9. Any products that appear in red text need costs associated with them.
- 10. Click **Edit** and fill out the needed information.
- 11. When finished, click the **Add Item** button and **Close**.
- 12. When you are finished assigning costs, click **Save** and **Done** at the bottom of the screen.

To Create a Planning Report:

- 1. Select **Reports** from the top menu.
- 2. Select **Planning Reports**.
- 3. Select the **Grower**, **Farm**, or **Field** you wish to report.
- 4. Select a **Scenario**.
- 5. Select the **Type of Report** you wish to create.
- 6. Select the **Preview** button.
- 7. An Adobe PDF report will open. Click the **Save** button to save it to your hard drive. Click the **Print** button to print a copy.

Converting a Scenario to a Recommendation

A Scenario can be converted to a Recommendation and sent to another SST Summit or to SST Stratus.

- 1. Select Plans/View Apply Plans.
- 2. Select the **Scenario** to be converted to a recommendation.
- 3. Click the **Convert button** in the lower-left corner of the view.
- 4. Complete all the needed information regarding **Crop Season**, **Fulfill Dates** and any **Notes** that may need to be filled out.
- 5. Click the **OK** button to finish this process.

Converting a Recommendation to an Operation

Once fulfilled, a Recommendation can be converted to a Saved Operation.

- 1. Navigate to the **Records** view.
- 2. **Open** to the field to work with.
- Click the Open button and select the Recommendation to convert to a Record.
- 4. **Choose** from the options given as is appropriate.
- 5. **Click** the **Save** button to finish this process.

Creating Planning Reports

Once Plans have been filled out and recorded, and cost groups have been populated to each field for the items selected various reports can be ran from these data.

- 1. Choose the **Reports** button.
- 2. Select the Planning Reports option.
- 3. Choose the Grower, Farm, Field and Scenario to run the report.
- 4. On the right side of the page select the types of Financial or Planting reports that you want to run.
- 5. Click the **Preview** button.

Chapter 6: Record Keeping in SST Summit

Record View Tools



Recording An Operation in SST Summit (General Application)

- 1. Select **Records** from the top menu.
- 2. Choose the **Edit** button on left side of the screen.
- 3. **Uncheck any operations** you will not collect data for.

 Note: you will only need to do this one time. You can modify this list as needed.
- 4. Click the **Save** button.
- 5. On the right side of the screen, select the appropriate **Grower/Farm/Field**.
- 6. On the left side of the screen, choose the **Operation** you will be recording.
- 7. **Select the field or part of the field** you wish to assign data to.
- 8. **Fill out the drop-down lists** for the selected operation.

Note: The first time you use the Records section you must select Manage Pick-List for each drop down list item. Simply select the most commonly used inputs, rates, etc. The pick lists can always be modified and they are available globally to every Grower.

- 9. When finished recording an operation, click the **Save** button at the bottom left of the screen.
- 10. Fill out the **Season, Event Date, Name**, and any notes.
- 11. Click the Save button.

Recording a Deep Soil Sampling Operation

- 1. Select **Records** from the top menu.
- 2. Choose the **Grower/Farm/Field** from the list.
- 3. From the **Operations** list select **Soil Sampling**.

- 4. Select the **Edit** button and turn on the items for the Deep Soil Sampling such as Subsoil 1 Sample ID, Subsoil 1 Sample Depth, Subsoil 2 Sample ID, Subsoil 2 Sample Depth, etc. How deep you are sampling will determine what items you'll need to turn on and fill out in the following steps.
- 5. From the dialog box select either New Polygon or New Point, whichever one is appropriate for your application. (*This example will be for a New Point Operation*.)
- 6. Select the Drop-Point Tool (the blue point tool on the tool bar) and drop the first point where you want it on the field. (*Before you drop a second point you will need to fill out the needed items on the left-hand side of the screen.*)
- 7. The first point will be selected or yellow in the view, now on the Soil Sampling Operations list fill out the following items Sample ID, Sample Depth, Sample Depth Units, and all the subsequent Subsoil 1 Sample ID, Subsoil 1 Sample Depth, etc. that is necessary for your soil sample. (Fill out the SSI Sample Depth to and hit the "Enter" key, the other information will fill out automatically within the needed items.)
- 8. When all the depths are filled out go back into the view and begin dropping your second point and so on until all points are dropped within the field.
- 9. Select the Save button and fill out the Season, Event Date, and User Defined Name. Select the Save button again to save the Operation. This file can now be sent down to SST Stratus to be used in the field for pulling the samples.

Creating a Recommendation

- 1. Select **Records** from the top menu.
- 2. On the right side of the screen, select the appropriate **Grower/Farm/Field**.
- 3. On the left side of the screen, choose the **Operation** you will be recording.
- 4. **Select the field or part of the field** you wish to assign data to.
- 5. **Fill out the drop-down lists** for the selected operation.
- 6. When finished, click the **Save** button.
- 7. Place a check mark next to **Save as recommendation**.
- 8. Fill out the **Season, Name, Recommended Dates** and any notes.
- 9. Click the **Save** button.

Note: Recommendations are just that, they are what a crop consultant or crop advisor suggest that a grower might need to do. An example might be planting a certain rate of corn of a specific hybrid on specific soils across the field.

Creating a Tank Mix Recommendation

- 1. Using one of the 13 different Operations that can be stored as a Tank Mix Recommendation, select one such as Herbicide.
- 2. Fill out the Product(s) and amounts, units, etc.
- 3. You are required to fill out Carrier, Total Application Rate, and Total Application Rate Units. Save this as a Recommendation.
- 4. Choose Data Mgmt./Export Data/Export Recommendations/Tank Mix.
- 5. **Select the appropriate controller**, choose a storage location, and name the file
- 6. In the last box, select to **Create Loadsheet** before selecting **Export**. This will create the .txt file that will contain the product amount and total amount information. Your recommendation file will be in the location where you chose to store this in the earlier step.

Converting a Recommendation to a Saved Operation

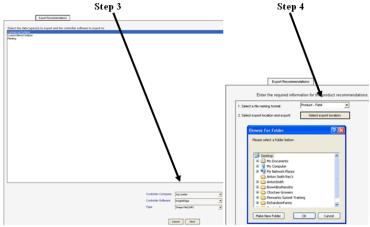
- 1. Select **Records** from the top menu.
- 2. At the bottom left of the screen, select **Open**.
- 3. **Choose a recommendation** from the list and click **Open**.
- If changes are necessary, select those from the drop down lists and click Save.
- A dialogue box opens. You can choose to Fulfill, Overwrite Existing, Save as New or Skip.
 - Choose **Fulfill** to convert the recommendation to a saved operation (a record of what was done on the field).
 - Choose Overwrite Existing to overwrite a previously saved recommendation.
 - Choose Save as New if you made changes and wish to save it as a new recommendation.
 - Choose **Skip** if you don't want to save the recommendation.

Exporting Fertilizer Operations Created in the Records View.

When a fertilizer operation has been saved as a recommendation, this can be exported to shape file based controllers.

- 1. Fill out the **Fertilizer Operation** as needed in the **Records** view.
- 2. Save this as a **Recommendation**.
- 3. Navigate to **Data Mgmt./Export Data/Export Recommendations**/and choose the appropriate files to be exported.

4. Fill out all the requested information and choose the location where to store the file. From this location, you will make a copy of this file to take to the controller software.



Reference Database Request Form

SST Software personnel manage all the reference database items used in SST Summit and SST Stratus. In order to share data between multiple programs, the collected data must be in a standardized format. Although tremendous effort is spent keeping the reference database up to date, there may be instances where data items you need are not available for selection. If this is the case, please submit a request to us and we will add the items in the next SST Summit update. The following steps outline this process.

To Submit a Reference Database Request (must be connected to the Internet):

- 1. Select **Home** from the top menu.
- 2. Select **Updates** on the left side of the screen.
- 3. Select **Reference Data Request**.
- 4. Fill out the required **contact information** form.
- 5. In the text box, **write a request** for Hybrids/Varieties, Herbicide, Insecticides, Fungicides, Weeds, Insects, Diseases, Tractor Models, etc. you wish to be available in the pick lists. Please mention the specific item that is needed and include any additional information that might assist SST Software personnel with the research and entry process. Examples include crop type, pesticide type, product registrant, registration number, manufacturer website, manufacturer phone number, etc.

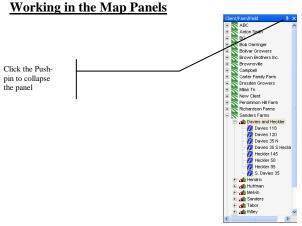
Chapter 7: Working in the Maps Section

The Maps section is used for viewing all the data layers you have collected on a given Grower, farm, or field. For FarmRite users, it is also used for creating and editing Product Recommendations.

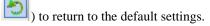
Viewing Data

View Layers in Maps Section

- 1. Select **Maps** from the top menu.
- 2. Select the **Grower/Farm/Field** you wish to view. Available data layers appear on the left.
- 3. **Check** on a layer you wish to view.
- 4. **Double-click** on the layer to open the Legend Editor. The Legend Editor allows you to change color and legend settings.
- 5. Create a PDF report by selecting the **Print Report** button on the toolbar.



- In the Maps section, you can minimize and maximize the panels by clicking on each panel's push-pin button.
- You can also drag the panels left or right to maximize the center map.
- At any time you can select the Undo button (green circular arrow button



Maps Section Tools



• The various tools in the toolbar are from left to right: Zoom-in, Zoom-out, Zoom-all, Pan, Measure Tool, Print Report, Create Management Zones, Create a Field Specific Image, Export to Google Earth, Create Road Maps, Create Routing Map, and a Display Value feature that lets you click anywhere on the map to see the specific value at that point.

Right-Mouse Click Options

By right-mouse clicking on any layer you will be presented with a list of
options to perform on that layer.

Right-Mouse Click Options on Yield Data

• Right-mouse clicking on a yield layer allows you to adjust yield, modify the time stamp for calculating the yield, or revert to the original files.

Layers Button

• In the top-left corner is the Layers button, this gives the user a selection on different options to be performed on all the layers.

Merge Tool

Under Edit Data is an option to Merge Data, use this if you have multiple
layers of the same data type such as soil test points, EC data, or nutrient
recommendations. This tool will combine the old individual layers and
merge them into one new merged layer. This layer can then be used to
import soil test results into, place orders, or create a recommendation file.

Create/Edit Product Recommendations

Refer to the FarmRite Chapter.

Soil Sampling Recommendation from Soil Type

By right-mouse clicking on a soil type layer (or a layer that was surfaced through SST FarmRite) and selecting "Soil Sampling", a user can create a polygon based soil sampling recommendation. This recommendation can then be loaded on to SST Stratus for field sampling.

Creating Management Zones

- 1. Select **Maps** from the top menu.
- Turn on the layer of data that you want to create a management zone from by placing a check mark in the box to the left of the name of that layer.
 Also, click on the background of that layer or the legend, it will turn dark gray.
- 3. Click on the **Management Zone button** on the menu bar. It is a multicolored icon in a square shape.
- 4. This will open the Management Zone tool Editor. This gives the user the ability to create further splits, union multiple zones into one zone, measure out how they want to make the splits, etc. You can also name this by typing in an appropriate name for that management zone. (For more detailed information refer to the online SST Summit Helpfiles).
- 5. Now, when you place a FarmRite Order or record Records in SST Summit you can use these management zones to drive what is to be recorded or ordered upon within these field boundaries.

Management Zone Tools

Within the Management Zone Editor tool are a few more options for working with management zones. Although you can create Management Zones in the Records view, you can only access the Management Zone Editor tool in the Maps view. The Editor gives the user more options for working with a management zone.

- When choosing the **Load Shapefile** option you now have two choices; A) import in **Polygon shapefiles**, or B) import in **Point shapefiles**.
- When saving a Management Zone, you can assign to a specific Crop Season or to All Crop Seasons.

Grower/Farm/Field Window Pane Options

- 1. In the **Maps** view, open the **Grower/Farm/Field** window pane.
- 2. **Right-mouse click** on any field name and you have options for the Grower/Farm/Field ID, Load Boundary Only, or Show Intersecting Fields.

The Grower/Farm/Field Id would be used for any technical related issues within these data. The Load Boundary Only does exactly that, to re-load any of the existing layers, simply turn them back on, in the **Layers** drop-down list for that field. The Show Intersecting Fields will do exactly that as well, once they appear the user can make a decision to combine them to alleviate any spatial errors.

Product Editor

- In the Maps view, right mouse click on the Recommendation layer that needs editing.
- 2. Choose Edit Product Rec.
- 3. Make any of the needed changes and select the **Save** button.
- 4. **Name this recommendation** and click the **Close** button. This new recommendation will now appear in the list.

Request Dispatch

- 1. In the **Maps view, right-mouse click** on the Recommendation layer that needs to be dispatched and choose **Request Dispatch.**
- Select the Dispatcher, set your Cutoff Date and set up the Task Window and click Request. Refer to the section on Logistics for further instructions.

Chapter 8: Creating Reports

Summit Report options are found under the Reports/Record Reports section.

Creating Record Reports

- 1. Select **Reports** from the top menu.
- 2. Select the **Record Reports** option.
- 3. On the left of the screen, choose the Grower/Farm/Field.
- 4. On the right side, choose one or more operations to report.
- 5. You can narrow your search by season, date and the type of report you wish to create. You can choose Applications, Recommendations or Both.
- 6. Select the **Preview** button to generate the report.
- 7. **Save** the report to your hard drive.

Note: You can change the color, logo, and image settings under Reports/Settings.

Report Examples

Harvest Reports

- 1. Select **Reports** from the top menu.
- 2. Select the **Record Reports** option.
- On the left of the screen, choose the Grower/Farm/Field you wish to create a report for.
- 4. On the right side, select **Harvest Reports** and select **Yield Map**.
- 5. Make selections and select the **Preview** button.

Other options include Yield by Soil Type, Yield by Hybrid/Variety, through Yield by Management Zone. Multiple reports can be created at once by placing a check-mark in each of the boxes to run that specific report. These will appear in a single .pdf file.

Insecticide Reports

- 1. Select **Reports** from the top menu.
- 2. Select the **Record Reports** option.
- On the left of the screen, choose the Grower/Farm/Field you wish to create a report for.
- 4. On the right side, select **Pesticide Reports** and select **Insecticide**.
- 5. Make selections and select the **Preview** button.

Soil Sampling Reports

- 1. Select **Reports** from the top menu.
- 2. Select the **Record Reports** option.

- 3. On the left of the screen, choose the **Grower/Farm/Field** you wish to create a report for.
- 4. On the right side, select any of the **Soil Sampling** options. (*Notice the Nematode options that are available as well*)
- 5. Make selections and select the **Preview** button.

Cost Analysis Reports

These reports allow you to calculate input costs for a field.

- 1. Select **Reports** from the top menu.
- 2. Select the **Record Reports** option.
- On the left of the screen, choose the Grower/Farm/Field you wish to create a report for.
- 4. On the right side, select **Cost**.
- 5. Make selections and select the **Preview** button.

Input/Cost Summary Reports by Crop

Users have the option of breaking down input/cost summary reports by crop and season. This feature is found in the report settings for the cost reports.

Option to Remove Logo from Report

1. Navigate to Reports/Settings/Logo Settings.

Creating Planning Reports

- 1. Select **Reports** from the top menu.
- 2. Select the **Planning Reports** option.
- 3. Choose the **Grower/Farm/Field** and the **Scenario** you wish to report.
- 4. On the right side, select the **type of report** you wish to create.
- 5. To change settings, click the **Selected Report Settings** button.
- 6. Select the **Preview** button to open a .pdf of the report.

FarmRite Reports

These reports are found under the **Reports/FarmRite Reports** section.

Note: FarmRite Reports are called Mapbooks. These Mapbooks are compiled by SST Development Group, Inc. They are assigned to the Summit Group ID for an individual SST Summit. To be assigned a Mapbook, contact your service provider or SST to start the process.

Creating FarmRite Reports (Mapbooks) Output

- 1. Select **Reports** from the top menu.
- 2. Choose FarmRite Reports.
- 3. Select the appropriate **Grower**, **Farm**, **Field**.
- 4. Select an available **Mapbook**. (If you do not have a Mapbook available, contact your service provider or a SST representative.)
- 5. Select the **Settings** button to choose the folder structure you wish to use.
- 6. You have the option to filter reports by date and season.
- 7. Click the **Map** button.
- 8. A window will pop up after mapping is complete with results of success or failure.
- 9. **Double-click** a map to open a pdf or **right-click** a map to navigate to the location of the pdf on your hard drive.

Chapter 9: FarmRite - On-Line Processing Service available to SST Summit Professional users only

FarmRite is a sophisticated web-based data management and processing service only available to SST Summit Professional users. FarmRite is ideal for major input supply companies that want to offer new decision-support services to their customers and partner-companies. It is a fully customizable service that allows you to define the agronomic equations, company logos, and map settings you want to use for your information product offerings (such as variable rate fertility recommendations, yield mapping and analyses, etc.). Orders are then placed, processed, securely backed-up, and delivered to you in a matter of minutes.

Common Field Boundaries (CFB) Tool

The CFB tool helps to reduce duplication of boundaries when two or more SST Summits have set up a SyncNow relationship with one another. To reduce duplication when digitizing new field boundaries, all boundaries that exist within an organization will be visible in the digitizer view when adding new fields. Field boundaries that are already digitized will appear as blue, fields that are being created are displayed as green, and fields that already exist in other Summits within your organization will appear as red. This allows the user to select the already digitized field boundary and will alleviate duplication of these files. This will not fix any existing problems that existed because of these issues from the past; they will still need to be resolved.

To work with the Common Field Boundary Tool:

- 1. When the Digitizer view is zoomed to a field area the **existing field boundaries** that are on another's Summit **will appear in Red**. (If these do not, **select** the Reload Common Field Boundary option).
- 2. Choose the **Select Common Field Boundary** option and click on the field.
- 3. A selection window will appear showing what boundaries exist for that geography. If more than one boundary appears in the view, you'll need to choose the one that will be the final boundary. You do this by choosing the **Hide Common Field Boundary option and turning off the ones that aren't needed.** This will load only the one boundary into the view.
- 4. Now choose the **Select Common Field Boundary option** a second time, this time only one boundary map shows up. Choose the **Select** tool with the right-facing arrow.
- 5. The boundary will appear as a green outline indicating that it is in the being created state. Select the **Done** button.

6. The **Grower-Farm-Field hierarchy** will appear. **Select** the **Save** button. These names can be changed under the Setup/Field Management Setup/Edit Delete Fields. if needed.

Setting Up a FarmRite Account

- If you are a FarmRite customer and have not yet received permissions, please contact your FarmRite account administrator or SST Software's FarmRite Operations Manager.
- Note: you must create a SyncNow Account before using FarmRite.

Placing FarmRite Orders

- 1. Select **FarmRite** from the top menu.
- 2. Select Place New Orders.
- 3. Select the **Crop Season** and enter an **Order Name**.
- 4. Select the appropriate **Grower/Farm/Field**.
- 5. Select the **Tasks** you wish to complete on this field(s) and select **Next**.
- 6. If necessary, choose the correct management zone to use.
- 7. If this is a whole field recommendation click **Next**, if not; choose the Management Zones to run the order from and continue.
- 8. Fill out all the **Parameters**.
- 9. Click Next.
- 10. Continue this for each task until all are complete.
- 11. Click the **Place Order** option.
- 12. Choose whether to print the details or not and continue.
- 13. Choose whether to place another order.
- 14. To follow the progress of your order, select **Dashboard/Display Live Order Tracking**.
- 15. Click the **SyncNow** button to download the processed data.
- 16. To view the processed data (information products); select **Maps** from the top menu.
- 17. Select the appropriate **Field**. The data layers will be available on the left of the screen.

Placing Orders by Management Zone

When placing the order by management zone, you have the option to **Select by Name.** This is only available if labels are attached to a management zone. If you select the label name, all associated polygons will be selected by default. To have this option you must place an order on this layer of data to be surfaced first, and then create the **Management Zone** from this layer.

- 1. **Place an Order** on any data that can be surfaced such as yield, pH, P, K, etc.
- When SST FarmRite is finished go to the Maps section and make active and turn on the layer to use, and then click the Management Zone button.
- 3. You can re-name the management zone and re-name the classes; if you need to, then **Save** this file. In the **Records section**, when you load this Management Zone to use you'll notice that the classes are labeled in the load view.
- 4. When you place an order on a field that has a management zone created in this manner, you'll notice that the classes are labeled and can be selected individually or grouped together, whichever is the appropriate choice to make.

Resolving Delayed Orders

- 1. Select **FarmRite** from the top menu.
- 2. Select Manage Orders.
- 3. In the **Order Num:** drop down list, select the **delayed order number**.
- 4. Click the **delayed field** (highlighted in red) and then click the **delayed task** (highlighted in red).
- 5. Select **Preview Tasks** or **Cancel Tasks**. Preview Tasks will open a screen that allows you to resolve the problem. If Duplicate Data is found, you can commit an operation to use for that task. You will have to do this for each delayed task. You may have to reorder or contact SST Customer Service for other delayed messages.
- o **No Source Data....**the task is missing needed data (soil test results, yield, ec data, etc.).
- Duplicate Data.....there is more than one set of data to use. You will need
 to select and commit the appropriate layer for the order to re-que on the
 FarmRite server.
- An error occurred with the field boundary.....you'll need to edit in the digitizer screen and reorder.
- Outside the processing range.....the task cannot be completed because the field is smaller than one acre or larger than our maximum acreage size.

Setting up Default Products

You can choose to set up default products so that when nutrient recommendations are received via SyncNow, your default product recommendations are automatically created. You can always edit these in the Maps section but it will automate the creation of the product recommendations from the outset.

- 1. Select **Setup** from the top menu.
- 2. Select **Product Setup** and select the **Default Products** tab at the top.
- 3. Select the **Nutrient** to be addressed
- 4. Place a check mark in the "Auto create Product Recommendations" box and fill out all the needed inputs regarding Product, % product, units, Application charge, etc. that you will use to satisfy each nutrient recommendation.
- 5. Click the **Save** button when completed.
- 6. Continue these steps for all applicable nutrients.

Creating and Editing Recommendations

- 1. Select **Maps** from the top menu.
- 2. **Click** on the appropriate layer to make it active. *The layer will have a gray background when it is active.*
- 3. Select **Edit Data** at the top of the Layers panel.
- 4. Select Product Recommendations/Create/Edit.
- 5. Adjust the various options such as Commercial or Custom, the product you wish to apply, as well as the units. When finished select **Save**. (Notice that you can right-mouse click on recommendations listed in the credit nutrient using...box and get a preview of the recommendation including the parameters used to create it. This should make it easier to identify a recommendation to adjust without having to rely on just the name.)
- 6. A new product recommendation layer will be created and can be viewed when you close the SST Summit Product Recommendation Editor window.

Creating Recommendation Controller Files

- 1. Select **Data Mgmt.** from the top menu.
- Select Export Data and select the Export Recommendations tab at the top.
- 3. Choose the **Controller Software** and the **Controller** to be used.
- 4. Click the **Next** button.
- 5. Choose the appropriate Recommendations to export and select Next.
- 6. **Fill out the information** needed for a specific controller.
- 7. **Browse** to the location on your computer you wish to save the file.
- 8. **Copy** the file(s) to a memory card for use in the controller system.

Creating FarmRite Reports

These reports are found under the Reports/FarmRite Reports section.

Creating FarmRite Reports (Mapbooks)

1. Select **Reports** from the top menu.

- 2. Choose FarmRite Reports.
- 3. Select the appropriate **Grower**, **Farm**, **Field**.
- 4. Select an available **Mapbook**. If you do not have mapbooks available, contact your FarmRite administrator.
- 5. Select the **Settings** button to choose the folder structure you wish to use.
- 6. You have the option to filter reports by date and season.
- 7. Click the **Map** button.
- 8. A window will pop up after mapping is complete with results of success or failure.
- 9. **Double-click** a map to open a pdf or **right-click** a map to navigate to the location of the pdf file on your hard drive.

Chapter 10: Working with SST Stratus

SST Stratus is a software program that runs on a Windows mobile device and is used with a GPS receiver to collect data while in the field.

Installing SST Stratus

- 1. To install SST Stratus, the **handheld must be connected to the computer** through ActiveSync or Windows Mobile (in the Windows 7 OS).
- 2. Select SST Stratus/SST Stratus Setup/Install SST Stratus.
- 3. You will be asked where do you want to install, choose **to install to the SD Card or memory card**, (if you don't have one you may want to purchase one for this purpose).
- 4. Once the installation is complete, you can transfer data back and forth from SST Summit and SST Stratus.

About SST Stratus Relationships

Each SST Summit can have multiple SST Stratus relationships, but an SST Stratus can only have a relationship with one SST Summit. If you wish to have SST Stratus synchronize with two SST Summits, you can create a SyncNow relationship between the two SST Summits and synchronize all these data via your SST Summits to your SST Stratus.

Creating a SST Stratus Relationship

- 1. SST Stratus must be installed first to the handheld device, then navigate to SST Stratus/SST Stratus Setup/Manage Relationships.
- 2. In the **New Relationship Name** box **enter** in the name for this relationship.
- 3. **Select the Add Relationship** button and this will build this relationship with this specific SST Summit.

Loading SST Stratus from SST Summit

See Chapter 1 for SST Stratus installation instructions. Once SST Stratus is installed and a relationship has been established, you are ready to load SST Stratus with field boundaries and data.

- 1. Connect your hand-held computer to your PC.
- 2. In SST Summit, select the **SST Stratus** button from the top menu.
- 3. Select **Load SST Stratus**.
- Follow the directions to pick the sets of data you want to load into SST Stratus and select Next.

- Select the fields, data, operations, etc. you want to load into Stratus and select Next.
- 6. Select **Start Transfer**.

Common Field Boundaries (CFB) Tool

Before collecting a new field boundary with SST Stratus, the user can check in SST Summit to see if that boundary already exists within their organization. To reduce duplication when digitizing new field boundaries, all boundaries that exist within an organization will be visible in the SST Summit digitizer view when adding new fields. Field boundaries that are already digitized will appear as blue, fields that are being created are displayed as green, and fields that already exist in other Summits within your organization will appear as red. This allows the user to select the already digitized field boundary and will alleviate duplication of these files. This will not fix any existing problems that existed because of these issues from the past; they will still need to be resolved.

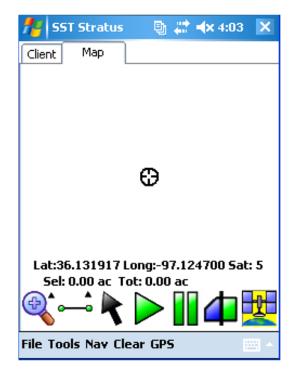
To work with the Common Field Boundary Tool:

- 1. In Summit, when the Digitizer view is zoomed to a field area the **existing field boundaries** that are on another's Summit **will appear in Red**. (If these do not, **select** the Reload Common Field Boundary option).
- 2. Choose the **Select Common Field Boundary** option and click on the field.
- 3. A selection window will appear showing what boundaries exist for that geography. If more than one boundary appears in the view, you'll need to choose the one that will be the final boundary. You do this by choosing the **Hide Common Field Boundary option and turning off the ones that aren't needed.** This will load only the one boundary into the view.
- 4. Now choose the **Select Common Field Boundary option** a second time, this time only one boundary map shows up. Choose the **Select** tool with the right-facing arrow.
- 5. The boundary will appear as a green outline indicating that it is in the being created state. Select the **Done** button.
- 6. The **Grower-Farm-Field hierarchy** will appear. **Select** the **Save** button. These names can be changed under the Setup/Field Management Setup/Edit Delete Fields, if needed.
- 7. These new boundaries can be sent down to SST Stratus for data collection and alleviation of field duplication.

Collecting a New Field Boundary with GPS

- 1. Open SST Stratus
- 2. Select Tools / Collect/Edit Field Boundaries

- 3. Select Create New Field
- 4. Tap the **Satellite Icon**. The button will turn yellow when the GPS signal is acquired. It will turn green when WAAS correction signal is acquired.
- 5. Tap the **Start button** (green triangle) and begin driving or walking the field boundary.
- 6. Tap the **Stop button** when finished.
- 7. Choose File/Save and name the Grower/Farm/Field.



Zoom-In Measure Tool Select Start Pause Split Satellite Accuracy

Editing an Existing Boundary

- 1. Open SST Stratus.
- Option 1: If you are within the field boundary and are using a GPS receiver, you can use the GPS Select Field option to automatically find and open the field.
- 3. Option 2: Select the **Grower**, **Farm**, and **Field** you wish to edit.
- 4. Select Tools / Collect/Edit Field Boundaries.

- Choose Edit Selected Boundary. The field boundary will appear and the GPS button will be active. In order to edit a boundary you must use a GPS receiver.
- 6. Drive inside the field and tap the **Play** button (green triangle) and drive outside the boundary encompassing the area you wish to add to the existing boundary.
- 7. Drive back into the existing boundary then tap the **Stop** button.
- 8. Use the **Select** tool to select both polygons and tap **Tools / Union Selected Polygons**. Note: you can select the existing boundary, delete it, and redrive the new boundary outline, if this would be more efficient for collection. This will retain the same GUID and all the existing data.
- 9. Choose **File / Save...** to save the new field boundary.

Replacing an Existing Boundary

- 1. Open **SST Stratus**.
- 2. **Option 1:** If you are within the field boundary and are using a GPS receiver, you can use the **GPS Select Field** option to automatically find and open the field.
- 3. Option 2: Select the Grower, Farm, and Field you wish to edit.
- 4. Select Tools / Collect/Edit Field Boundaries
- 5. Choose **Edit Selected Boundary**. The field boundary will appear and the GPS button will be active. In order to replace/re-drive a boundary you must use a GPS receiver.
- 6. Choose the **Select** tool (arrow) and **tap the polygon** you wish to replace.
- 7. Select **Clear / Selected Polygon** to delete the polygon.
- 8. If GPS is not already on, tap the **Satellite Icon**. The button will turn yellow when the GPS signal is acquired. It will turn green when WAAS signal is acquired.
- 9. Tap the **Play button** (green triangle) and begin driving or walking the field boundary.
- 10. Tap the **Stop button** when finished.
- 11. Choose File/Save and name the Grower/Farm/Field.

Creating a Management Zone

In SST Stratus, management zones are created using the split tools.

- 1. Open **SST Stratus.**
- 2. Select the Grower/Farm/Field.
- 3. Select the **Map** tab.
- 4. Choose Tools/Create Management Zone
- 5. To split a section of a field, select the **Split** tool and tap to draw a line across a boundary. Select the **Split** tool again to make the split.

- To create an interior split, select the **Interior Polygon** tool. Draw a polygon inside the field boundary and select the **Interior Polygon** tool again to complete it.
- 7. Select File/Save and name the management zone.

Recording Operations (Collecting Records)

- 1. Open SST Stratus
- 2. Choose the appropriate **Grower/Farm/Field** and **Operation**.
- 3. Tap the **Map** tab.
- 4. Choose the appropriate data type such as Polygon, Path, or Line.
- 5. If you are recording data on a whole field, simply fill out the **Operation** tab with the correct input information.
- 6. If the field must be split into management zones, use the **Split** tool to divide your field into management zones.
- 7. Tap the appropriate management zone and fill out the **Operation** tab with the correct input information.
- 8. When completed, choose File/Save.

Recording a Grid Soil Sampling Operation

- 1. Open **SST Stratus**.
- 2. Select the **Grower**, **Farm**, **Field**, and **Soil Sampling** Operation.
- 3. Tap the **Map** tab. The "Choose a Feature Class" dialogue box appears.
- 4. Select **Point**.
- 5. Select **Tools** and choose an option to lay a grid on the field or simply begin logging points with your GPS.
- 6. Fill out the table for the **Id number**, the **Sampling Depth**, and the **Sampling Depth Units**.
- 7. Click the Point tool, (the finger tool) and begin sampling the field.
- 8. When finished, choose File/Save and fill out the pertinent information regarding season and name.

Recording a Deep Soil Sampling Operation

- 1. Open **SST Stratus**.
- 2. Select the **Grower**, **Farm**, **Field**, and **Soil Sampling** Operation.
- 3. Tap the **Map** tab. The "Choose a Feature Class" dialogue box appears.
- 4. Select **Point or Polygon** (whichever is appropriate for your task.)
- 5. Choose "Yes" to filling out data before logging with GPS.
- 6. Fill out the table for the **Id number**, **the Sampling Depth**, **and the Sampling Depth Units for all the depths** you'll be pulling samples for.
- 7. Click the Point tool, (the finger tool) and begin sampling the field.

8. When finished, choose **File/Save** and fill out with the pertinent information regarding season and name.

Importing Data from SST Stratus back into SST Summit

- 1. Connect your hand-held computer to your PC.
- 2. In SST Summit, select **SST Stratus** from the top menu.
- 3. Select Synchronize Changes with SST Stratus.
- 4. Select the **Import SST Stratus Data** button.

Setting up the COM Port for your GPS Receiver

- 1. Choose **GPS/GPS Settings**
- 2. Select the **COM** tab
- 3. Choose the correct Port, Baud Rate, etc. in this view.

Auto Log

• To change the Auto Log setting choose **GPS/GPS Settings/Auto Log.**

Offsets

You can offset the GPS to the left, right, front, or back of the GPS receiver in order to more accurately collect information.

• To change the Offsets choose GPS/GPS Settings/Offsets.

Chapter 11: SST LOGISTICS

Introduction

SST Logistics is a program that will help track what and where products are to be applied. It also quantifies total product and creates several reports to help expedite the end process of applying inputs with greater efficiency. SST Logistics is optimized to run on two monitors in a 2048 x 768 resolution but has options to run in a single monitor configuration. Duel screens allow the Map of SST Logistics to be viewed on one screen and the Grid or Table information on another screen.

Setup and Application of the SST Logistics Program

To initialize the setup process of SST Logistics, the user will need to set up Service Provider Teams, and then assign who will be the Order Placer as well as the Order Receiver. Once this setup process is in place, SyncNow will be used to send data between each user and\or location running SST Summit Professional. There are two ways of using the program, 1) Sending Dispatch Requests, or 2) Sending Existing Data. Each of these option's steps will be shown in the following pages. If you elect to use the first option you will need to contact SST Development Group, Inc. to be assigned Locations for your Summit Group ID.

SST Logistics Functionality

Settings

- 1. To start, select the **Logistics** icon and choose the **Settings option.**
- 2. Under the "Service provider teams owned by you" drop-down list choose "New Team" and fill in what your teams will be called.
- Under the *Users that dispatch* type in the **Summit ID** and their **User Email** and click the Add button.
- 4. Under the *Users that request dispatch* type in the **Summit ID** and their **User Email.**
- Once this information is entered, navigate back to the **Send Dispatch** Request site.

Creating Dispatch Requests

Note: There are two ways to Send Dispatch Requests, either by Sending Dispatch Requests or Sending Data.

Option 1: Send Dispatch Requests

- 1. To start this process, click the Logistics icon at the top of the page.
- 2. Select **Send Dispatch Request** and take the default of **Send Dispatch Request** to get to the order page.
- 3. Select the correct Crop Season, enter an Order Name (optional), select the correct Grower/Farm/Field, choose the appropriate Service Provider, select the correct Operation Type such as Fertilizer or Fungicide, and set the From and To date ranges. Set the Cutoff date for this application and hit the Next button.
- 4. The ordering page for the geography will open, select either the whole field by clicking the Next button, or choose Management Zone and select the sub-field area to be applied.
- 5. Fill out the correct input parameters such as Insecticide, the Rate, Units, etc.... Once the first column is filled out properly, you can hit the Fill with First button to apply this to all fields.
- 6. The next page is for confirmation, if everything is correct click the **Place**Order button to continue.
- 7. A popup box will appear confirming the order was placed, you will be asked if you want to place another order. **Make the appropriate selection and continue.**
- 8. Once the order is completed on the FarmRite server click on the **SyncNow button** icon to Sync the information back to your desktop Summit.

Option 2: Send Existing Data

- 1. Select Logistics/Send Dispatch Request/Send Existing Data and Next.
- 2. Choose the Service Provider Team, App Window From and To dates, and the Cutoff Date.
- 3. Select the Crop Season and the Grower/Farm/Field/Operation.
- 4. **Choose the Request button** option and this Dispatch Request will be Sent.

Managing Dispatch Requests: Releasing to Dispatch

Before you can begin working with an actual order you must have it released. There are two tabs when you first open the Logistics Manager view; 1) Released, and 2) Not Released. When you first open this window the default is Not Released, simply click on the Released Tab and those requests that have been released will appear. The following directions demonstrate how to release a Dispatch order.

- 1. To start this process, select the **Logistics** icon at the top of the page.
- 2. Choose **Logistics Manager**.
- 3. Place a check mark in the box next to the Orders you want released and click the Release button at the bottom of this screen.

Managing Dispatch Requests: Dispatch Reports and Exports

- 1. To start this process, select the **Logistics** icon at the top of the page.
- 2. Select Logistics Manager.
- 3. Choose the **Release tab**, and then **select your Fields by placing a check mark** in the box next to the Fields you want to include in a Dispatch order. You could use the Select Tool in the Tools Pane to click on the field(s) needed to complete this Dispatch order as well, either method will get you the same result. (Notice also that Online Imagery, Summit Imagery, or Live Imagery can be turned on by placing a check-mark in the respective boxes in the right-hand bottom of the Tools pane). **Click the Dispatch button** in the bottom of this view.
- 4. Select the Dispatch Date, Order the fields as needed, and select the types of maps and reports. If you click the Settings button the Output Settings appears. This allows you to set specific images and units settings.
- 5. Click the Finish button and you will be asked where you want to store these files. Choose an appropriate file location and click OK.
- 6. Depending on the Reports you requested, you may be asked to Include or Skip certain maps that will appear. When finished a screen will appear with the file shown by date and order number. By right-mouse clicking on a folder (either on Exports or Maps), it will open showing the files that were created in this process.

Managing Dispatch Requests: Marking Completed

- 1. To start this process, select the **Logistics** icon on the top of the page.
- 2. Select Logistics Manager.
- 3. Place a check mark in the Fields to be marked as Completed.
- 4. Click on the Mark Completed button in the bottom of this view. Fill out the Season, Event Date, and Name (if desired) and click the Save button.
- 5. The Dispatch Request will be marked as completed and a date will appear in the Completed column indicating this.

Managing Dispatch Requests: Report

- 1. To start this process, select the **Logistics** icon on the top of the page.
- 2. Select Logistics Manager.
- 3. Select the Growers, Farms, and Fields to run this report by placing a check mark in their respective boxes. Click on the Report button. You will be asked where to store this file and once completed it will be a .pdf file that

can be opened with a right-mouse click. This report will show what requests are Released, Dispatched, or Completed.

SST Logistics View Panel Options

Date Range

- 1. To start this process, select the **Logistics** icon on the top of the page.
- 2. Select Logistics Manager.
- 3. In this view are Date Range options for searching; choose the appropriate From and To dates and click Search. This will limit the Search to the dates chosen. (These dates only apply to the Application Window Header within the Table, not when the request was generated, completed, or otherwise).

Ordered by and Grower

1. In the Ordered By and Grower options, selections can be made from the drop-down lists to limit which ones will appear in the view.

Status is and Status is not Filters

1. The Status is and Status is not filters work as follows; if one of the options is check marked under that column that will meet that query by appearing or not in the resulting view.

Product Filter

- 1. By choosing this option, the user can check-mark Products to limit what appears in the view based on a selection.
- 2. This, when selected, will narrow the list that appears in the view along with the Unique Products list. (e.g. If you chose Roundup in the Product Filter then the Unique Product list would show Roundup with Clarity or Roundup with other additives.)

Enable Distance filter

1. If checked, click on Set Options to set a distance from a chosen City and State. This will only show those fields that are within the set distance range. Click the Search button to activate this option.

Unique Products

 Unique Products filters recommendations to those containing the unique set of products selected. Again, this works in conjunction with what was selected in the Product Filter.

SST Logistics Grid (Data Table)

In the SST Logistics Grid, each column can be adjusted and manipulated by a right-mouse click on a column header such as Grower, Farm, or Field. This will present the user with a list of options to select from including Sort Ascending, Sort Descending, Clear Sorting, etc... The user can also left-mouse click on the header separation line and slide the column either to the left or the right. If a record within the Grid is selected the user can right-mouse click to Preview data or Zoom to layer. Zoom to layer will zoom in within the Map view to a selected Field. Hold down Shift and click within a box to select all the recommendations shown in the grid. To de-select all recommendations, hold down the Control key and click in a box.

Weather

Weather information can be accessed within the SST Summit including your region of interest for your Growers. You must have set up a SyncNow account for this to work, if you have not, refer to Chapter 3: Creating a SyncNow Account. Once you have synched your Growers, Farms, and Fields to your FarmRite account you will have access to the weather screen. In the future there will be in-depth reports, maps, legends, etc. available for the user. Today, it is simply a viewer for the weather patterns within your region.

The Weather map displays a pushpin for each grower you have synced with the FarmRite server. This will show your region selected for the weather with the current conditions and a 10 Day Forecast. It also includes a 36 hour forecast given hour by hour from the current date.

To access the Weather tool:

- 1. Click on the **Weather icon** on the top of the page.
- 2. You can choose to **View All Growers**, by clicking that button, or a **single Grower**, **Farm**, **or Field** based on your hierarchy and selection. If you choose View All Growers your local address is used for the weather map.

Appendix A: Handout Guides

These are some of the more common sets of procedures that many of our customers are using with our technology.

AA1: When Digitizing a Boundary

- 1. If a waterway or other feature, (rock outcropping, tree line, pond, etc.) is completely within the field and needs to be reduced from the cultivated acres, use the **Digitize** tool.
- 2. If a waterway or other feature, (rock outcropping, tree line, pond, etc.) is touching or extending beyond the boundary, use the **Split** tool. Then, follow up with the **Select** tool, then **Delete Selected Feature** to completely subtract that uncultivated area.
- 3. When using the Digitize tool to cut out a small area of a field, set your Settings to a really small number to always cut out anything that would be uncultivated. The default setting is 0.25 (or a quarter of an acre), set this to something like 0.0025, which will catch most areas you ever need to cut out of a field.

AA2: Working with SST Summit Professional and FarmRite

- 1. Digitize the boundaries in Summit. (Setup/Field Management Setup/Create New Boundary/Create Boundary using online imagery/Type in the city and state/digitize the boundaries).
- 2. Load Stratus with the boundaries. (SST Stratus/Load SST Stratus/Select the Growers, Farms, Fields and Saved Data to send to Stratus/Add to Existing).
- 3. In Stratus, grid and pull the soil samples. On Stratus; a) open Stratus, b) choose the Grower, Farm, and Field, c) choose the soil sampling operation, d) choose Tools/Create Grid Sampling Scheme, e) choose point and fill out the sample id, depth, and units to begin with, f) Select the field with the pointer tool, g) click the create grid tool, h) enter your settings, i) choose tools/create navigation route, j) click on the first sample to navigate to and drag the route you want to create, k) turn on your GPS and you will be guided to the first point. Click File/Save every so often and when finished click the File/Exit option.

- 4. Sync Stratus to Summit. When your Soil Test Lab gets completely onto the STI (Soil Test Import), then you'll print out a BarCode Report for each Field. This report is found under Reports/Record Reports/Soil Sampling Report/Barcode Report.
- 5. Import in your Soil Test Results from your Soil Test Lab. (Data Mgmt./Import Data/Soil Test Results/Choose your Lab's format/Browse to the file location/Click Next/Choose the field to import in and click Import/When finished click the Done button).
- 6. Place your FarmRite Orders. (FarmRite/Place New Orders/Choose the Season, give the order a name/select your Growers, Farms and Fields, and select the Tasks to run).
- 7. Only need to do this once, unless the Product changes....but you need to setup your Default Products for your Nutrient Recommendations. (Setup/Product Setup/Default Products/Setup each nutrient with the product to satisfy it with, and all your other settings, click the Save button).
- 8. **Click the SyncNow button** to get the data back from your FarmRite account.
- 9. Create your MapBook. (Reports/FarmRite Reports/Select the correct MapBook to run).
- 10. Create your Recommendation files to go to the controller. (Data Mgmt./Export Data/Export Recommendations/Select the controller/Select Recommendations to Export/Select the Export location).

AA3: Working with SST Stratus

- Installing SST Stratus
 - With Microsoft ActiveSync installed, cradle your handheld and let ActiveSync startup. You'll see a green circle in the lower right hand corner of your computer screen when it has completed its process.
- Select SST Stratus/SST Stratus Setup/Install SST Stratus (when installing
 we would suggest you install to a memory card such as a SD card or a Compact
 Flash card).
- Setting up a Relationship
 - Select SST Stratus/SST Stratus Setup/Manage Relationships.
 - Enter the name of your handheld and click the Add Relationship button.
- Updating SST Stratus
 - Select SST Stratus/SST Stratus Setup/Update SST Stratus