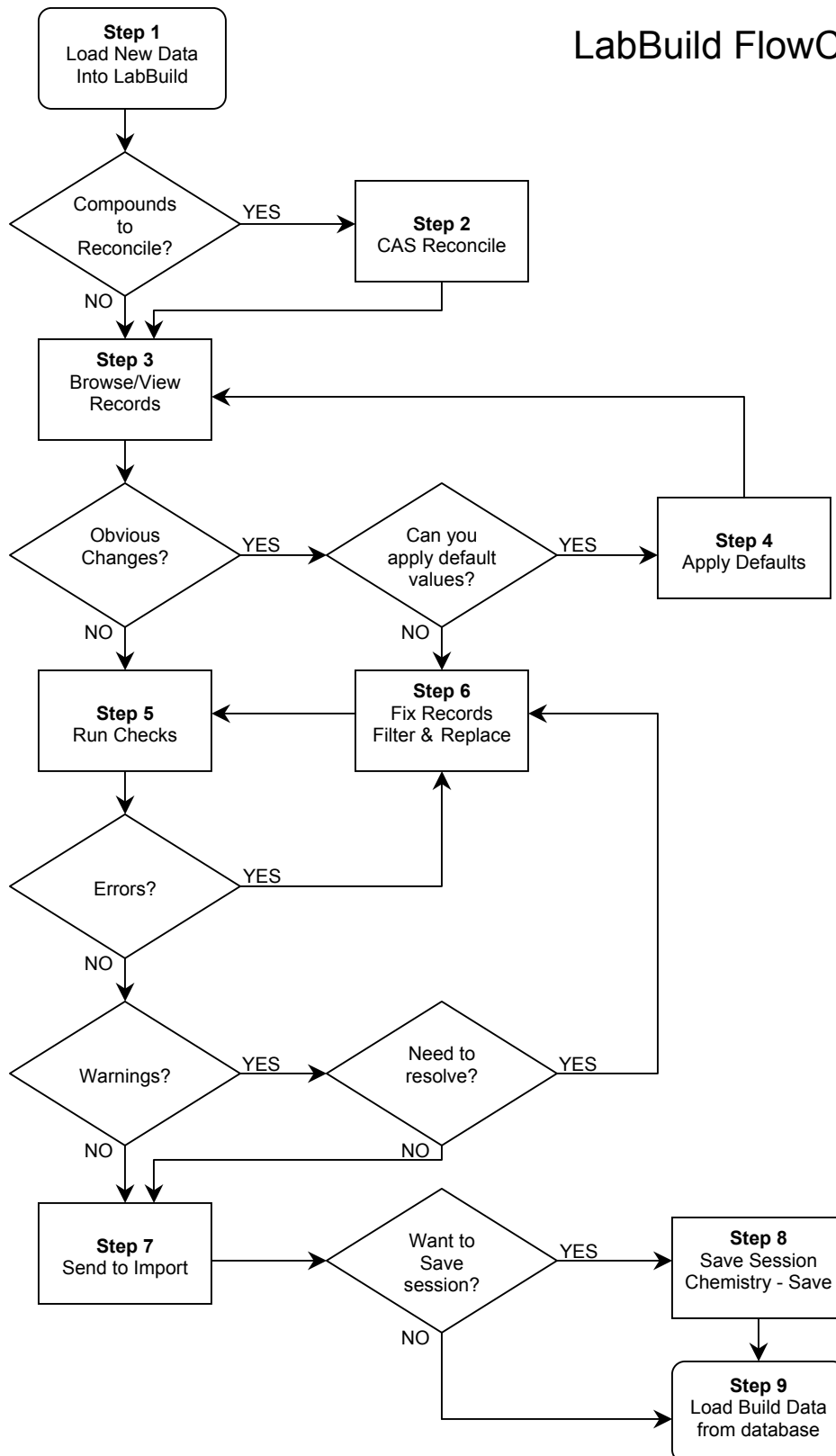




# IMPORTING CHEMISTRY DATA

## LabBuild FlowChart





# IMPORTING CHEMISTRY DATA

## Introduction: Preparing the EDDs and Setup

1. The EDD(s) must be in the format specified in the LabData Structure Notes available on the GIS\Solutions website.
  - If the EDD is a database file (dbf), the field names must match the field names of the structure notes.
  - If the EDD is not a database file, the sequence of the fields must match the sequence in the structure notes. Also, the EDD should not include field names.
2. Place the EDD(s) in an empty directory (we recommend the project\labdata directory or a subdirectory within this directory).

## Step 1: Load New Data

1. LabBuild is a GIS\Key component that imports and checks EDDs, and then prepares them for import into the GIS\Key database.
  - a. From the Scout Project Manager, double-click the 'LabBuild' icon.
  - b. Specify the location of the EDD(s) in the 'Lab/Temp' field. Click 'OK'.
  - c. At the Load/Save Data Window, Click 'Load' under 'New Data'.
  - d. Right-click to select the EDD and file type. Then click 'OK'. LabBuild displays the number of records currently loaded. If you want to load another EDD, repeat the process. When finished loading EDDs, click 'OK' again. After exiting the 'New Lab Data' window, you will not be able to load additional EDDs for that LabBuild session.

## Step 2: CAS Reconciliation

1. After loading your EDDs, LabBuild tries to match the constituents supplied by the lab to CAS numbers defined in the GIS\Key database. If no match is found for a lab constituent (i.e., LabBuild cannot match it with an existing compound in the database), GIS\Key will display a 'Load/Save Data Report'. Click 'Print' to display all the constituents that did not match with constituents in the database.
2. You must match (i.e., reconcile) these lab constituents to ones in the database:
  - a. Click 'CAS Reconcile'. This displays all previously reconciled constituents and new ones to be reconciled.
  - b. Double-click the constituent that needs to be reconciled.
  - c. Right-click in 'Reference CAS' field, select the corresponding constituent.

**NOTE:** If the correct CAS Number for that lab constituent has not been defined, add it to the database (see Chapter 6 for details). Then rerun the CAS Reconciliation.



# IMPORTING CHEMISTRY DATA

## Step 3: Browse/View Records

1. To view your records, at the Load/Save Data screen, click 'Work'.
2. Click 'Browse/View'.
3. There are several 'Browse/View Options'. Most of the time, the defaults are appropriate.
  - a. **Hide** - you can Hide specific records (will NOT be displayed if the box is checked).
    - **Checked OK** - records that have no errors or warnings
    - **Deleted** - records that have been deleted
    - **Sent** - records that have already been 'Sent to Import' (see Step 7)
    - **Unchecked** - records that have not been checked
    - **Warnings** - records that may have something wrong with them, but can be imported into the database
    - **Exceptions/Errors** - (cannot be hidden) records that have an error and cannot be imported
  - b. **Messages** - Display error messages while viewing records (uncheck box to display).
  - c. **Fields: Set Order** - Specify the order of the fields (from left to right). Available field orders are displayed if you right-click in the 'Description' field. Double-click the appropriate entry (e.g., 'Sites'). You can create your own order by entering a new description, then click 'Select' to modify the field order.
  - d. **Index Order** - Options for changing the order of the records.
4. Click 'OK' to view the records

## Step 4: Apply Defaults

1. At the 'Work Chemistry' window, click 'Apply Defaults'. Enter default values in the appropriate fields (e.g. Iced = "U"). If the 'Only If Empty' box is "Y", the change will only be applied for records where that field is empty (i.e., if the lab supplied a value, the value will not be changed). If "N", the default value will be applied to every record.
2. Click 'OK' to apply the default values.

## Step 5: Run Checks

1. At the 'Work Chemistry' window, click 'Checks'. This will check your data against other records in your dataset and against the database. Checked records are flagged as one of the following:



# IMPORTING CHEMISTRY DATA

- **Deleted** - Will not be imported
  - **Exceptions** - The record has an error that will prevent it from being imported
  - **Warnings** - The record may have an error, but it can be imported
  - **Checked OK** - The record has no Exceptions or Warnings and can be imported.
3. Click the '**Problems**' button to see the reason why records were flagged as errors or warnings. Click the 'Print' button to view the report on the screen.
- **Summary Report** - only displays the reasons and the corresponding codes (used for Filters, see below)
  - **Detail Report** - displays the errors and warnings for each record

## Step 6: Fixing Records

1. To resolve errors and warnings, return to the browser by clicking 'Browse/View', choose the appropriate 'Browse/View Options' (see Step 3), then 'OK'.
2. **Filters** - you can display specific records by selecting 'Table' - 'Filter'. Records will be displayed if they meet the 'For' condition (in FoxPro syntax). If they do not, they will be hidden.
  - a. **Description** - if a description is entered, the filter statement will be saved for future use. Right-click in the description field to select a previously-saved filter.
  - b. **For** - Enter a condition (using FoxPro syntax). Records that meet the condition, will be displayed.
  - c. **Examples** of filters (see handout for more examples),
    - Site\_id = "MW" - show all sites that start with "MW"
    - "08" \$ x\_error - shows all records with a 08 error code
    - "02" \$ x\_warn - shows all records with a 02 warning code
3. **Replace** - Replace values in a particular field by selecting 'Record' - 'Replace'. Replace statements only apply to those records currently being viewed (i.e., only to those being filtered).
  - a. **Description** - if a description is entered, the replace statement will be saved for future use. Right-click in the description field to select a previously-saved replace statement.
  - b. **Scope** - which records will the replace statement apply to (usually 'All')
  - c. **Field** - Select the field (column) in which your changes will be applied.
  - d. **With** - Enter the values or a statement that will go into the field.
  - e. **For (optional)** - Enter a condition (using FoxPro syntax). The Replace will only apply to records that meet the condition.



# IMPORTING CHEMISTRY DATA

f. **While (optional, not typically used)** - Enter a condition (using FoxPro syntax). Starting at the current record, the replace statement will work while the condition is met. At the first record that does not meet the condition, the replace will stop.

g. **Examples** of Replace statements

- **Field:** site\_id  
**With:** left (samp\_id,5)  
**For:** samp\_id = "MW"

Replaces site\_id field with the five leftmost characters of samp\_id for all records where samp\_id starts with MW.

- **Field:** samp\_depth  
**With:** val(substr(samp\_id,7,2))  
**For:** samp\_depth = 0

Populates samp\_depth with a substring of samp\_id. The substring starts with the seventh character of samp\_id and returns two characters (i.e., the seventh and eighth characters). Replace only applies to records where samp\_depth is zero. NOTE: Samp\_id is a character string and samp\_depth a number string, so VAL must be added to convert the character string to a number string.

## Step 7: Sending the Records to Import

1. If there are no Exceptions and all the Warning records are acceptable, the records are ready to send to the project database:
  - a. In the 'Work Chemistry' window, click 'Send to Import'.
  - b. Click 'OK' at the prompt. This creates temporary import files (with a ".tmp" extension) in the 'Lab/Temp' folder (where your EDD is stored).
  - c. Optional: View the temporary import files by clicking the 'Browse Built' button in the 'Load/Save Data' or 'Work Chemistry' windows.
2. NOTE: 'Sending to Import' does not import the records into the database. LabBuild has only generated tables (TMP files) that can be imported into the database. See Step 9 for importing these files into the database.

## Step 8: Saving the LabBuild Session

1. We strongly recommend you save your LabBuild session. This will not only keep a record of your changes in LabBuild, but a saved session can be used for reimport later if a mistake was made:
  - a. Click 'Cancel' to return to the 'Load/Save Data' window.
  - b. Click 'Save' under 'Chemistry' (or 'Radiology' for radiological data).



# IMPORTING CHEMISTRY DATA

- c. Enter a file name. The default is a letter (C for chemistry, R for radiology) followed by the date.
2. To reload a saved session, click 'Load' under 'Chemistry' or 'Radiology'.

## Step 9: Load Build Data

1. To import the records into the database, start the GIS\Key database from the Scout Project Manager.
2. Select 'Utility' - 'Load Build Data'.
  - a. In the 'Directory' field, specify the 'Lab\Temp' directory (from Step 1, Item 2) that contains the TMP and EDD files
  - b. Click 'OK'.
3. The status of the import will be displayed.
  - 'Skip' - no records were imported into that table
  - 'OK' - records were imported successfully
  - 'REJ' - no records were imported. Error reports are generated for each rejected table. These error reports are the c:\gistemp directory, with an "REJ" extension, and can be opened in Notepad.