This check list will ensure that you do all you can do before sending it to Susan McGlasson (hope springs eternal).

Check List – Finalizing Deploying Data Model

**CALCULATIONS**

When you're ready to finalize a data model you need to run a series of calculations before running the NREPO-QA reports, in the order listed below.

* Update attribute ID
* Update Domain ID
* DAG Level 1
* DAG Level 2 – You need to follow the instructions given in this calculation.
* Update Table Id
* Assign Alignment
* Update tablecolumn ID
* Update UOM ID

**Appendix A** gives more information on the calculations; such as where they can be found and what they actually do.

There are other calculations, but they deal with issues that we don't work with. Susan will take care of these.

**QA REPORTS**

Next step is to run a series of QA reports. Run the following NREPO QA Reports & Fix any errors found. Then rerun the report.

* NREPO-QA-Mod-Col- G0
* NREPO-QA-Mod-Col- G1
* NREPO-QA-Mod-Col- G2
* NREPO-QA-Mod-Col- G3
* NREPO-QA-Mod-Mod- G1
* NREPO-QA-Mod-Tab- G1
* NREPO-QA-Mod-Tab- G2
* NREPO-QA-Mod-Tab- G3
* NREPO-QA-Sys-Att- G1
* NREPO-QA-Sys-Att- G2
* NREPO-QA-Sys-Dom- G3

There other NREPO-QA reports, but we don't do much with the Tables/Columns/Attributes checked by them. Susan will deal with those.

**METADATA REPORTS**

After the Data Model is deployed it is time to produce the Metadata reports that are on the NASIS download site. Originally, the reports were text formatted but the process of turning them into PDFs was too complicated (especially when done only as new data models are deployed). It was also found that the formatting did not page break at the expected spots.

Creating the downloadable Metadata reports is a multiple step operation. It is still a complicated process but the end result is a PDF of the report output. We now run the Metadata reports that go to Excel, which are then saved as PDF files. Since these reports are only run when a new data model is deployed you should run them and follow the directions given in the Report's General tab.

Making these reports a few times during the development of the new data model should help keep you familiar with the process of creating the PDF version of each report's output.

Run the following NREPO-Style Metadata reports.

* NREPO-Style Metadata - Domains - Excel to PDF
* NREPO-Style Metadata - Relationships - Excel to PDF
* NREPO-Style Metadata - Tab Col Desc - Excel to PDF
* NREPO-Style Metadata - Table Columns Only - Excel to PDF
* NREPO-Style Metadata - Tabs and Cols - Excel to PDF
* NREPO-Style Metadata - Unique Constraints - Excel to PDF

These reports should be enough detail so someone else could create a database outside of NASIS.

The report outputs are very large, and take quite a while to run and finally display in your browser. It displays in the default browser, but I recommend using the latest version of IE. I haven't tested the output displayed in other browsers.

The next step in the process is to import the output into specific Excel workbooks. It can take an inordinately long time to select and copy the HTML output for pasting into the appropriate Excel workbook. I recommend waiting several seconds longer than you think it will take after doing the Cntl C before trying to paste it into the required Excel workbook's blank worksheet.

Obviously, you will need to have the Excel workbooks on your computer (or maybe in the S:drive is a better location).

The detailed steps to turn the report into a PDF file are outlined in the General tab of each NREPO xxx Excel to PDF report. In general they go something like the following.

If the user intends to create a PDF file of the output the user should save this browser tab as a separate browser file on the computer. It will be used in the process outlined below.

For some reason you can't just save the HTML output and import that directly in the Excel file. So please follow the following steps.

**CREATING THE PDF FILE**

**NOTE: Table Column Descriptions Report is to be treated differently.**

**NOTE: This is a very convoluted process and subject to failure depending on the number of tables and columns being selected.**

It is probably best to create these reports first, before Excel is ever run during the day. Maybe the day before.

* If Excel has already been used, it is probably best to run all the reports and save the browser files someplace you can find again.
* Then, at least, sign out of the Windows session. You may have to reboot your computer.
* Then start a new Windows session and open the appropriate Excel workbook. This is the file named in the General tab of each of the reports.

A separate process is required for Tab Column Desc report because for some reason Excels has a tendency to throw an EMET 5.2 Calling Error when trying to save or export the Excel final results. I haven't been able to figure out exactly what the problem is. However, it does seem to be related to the number of tables and columns in the System.

For all the rest of the reports follow the steps outlined below.

**NREPO-STYLE METADATA REPORT PROCEDURE**:

These reports are in the Soil Metadata Repository NASIS site folder. The names of the reports are as follows:

NREPO-Style Metadata - Domains - Excel to PDF

NREPO-Style Metadata - Relationships - Excel to PDF

NREPO-Style Metadata - Table Column Desc - Excel to PDF

NREPO-Style Metadata - Table Columns Only - Excel to PDF

NREPO-Style Metadata - Table and Columns - Excel to PDF

NREPO-Style Metadata - Unique Relationships - Excel to PDF

To create the standard Adobe PDF version of the Domains, Relationships, Table Columns Only, Tables and Columns, and Unique Relationships reports follow the steps below.

In NASIS, run the report. Each report has two or three parameters (selected from drop down choice lists) that must be populated so the report will run. They are:

System Version

Metadata Version

Domain Version

For a NASIS System suite of reports use the following as applicable:

System Version - System of interest. Works for all Systems. Required.

MetaData Version - METADATA 2.0.2 - Required

Domain Version - Current NASIS/SSURGO Domains - Required where requested.

The report will run and be displayed in the default browser.

There are individual Excel workbook(s) associated with each report. Below shows the name of the report and the Excel workbook used to create the report:

NREPO-Style Metadata - Domains - Excel to PDF

NREPO Domains BLANK.xlsm

NREPO-Style Metadata - Relationships - Excel to PDF

NREPO Relationships BLANK.xlsm

NREPO-Style Metadata - Table Columns Only - Excel to PDF

NREPO Table Columns Only BLANK.xlsm

NREPO-Style Metadata - Table and Columns - Excel to PDF

NREPO Table and Columns BLANK.xlsm

NREPO-Style Metadata - Unique Relationships - Excel to PDF

NREPO Unique Relationships BLANK.xlsm

NOTE: These reports are not limited to a NASIS System. Any System can be used. The files should be renamed to reflect which System is being processed.

1. Open the appropriate Excel workbook.
2. Switch back to the browser tab or saved HTML output holding the NASIS report output.
3. Select the entire report and then copy it. Using Ctrl-A and Ctrl-C usually works.
4. Switch back to the appropriate Excel workbook. With the cursor in cell A1, paste what was just copied, Ctrl-V works best.
5. Make sure the Developer Ribbon Tab is selected, then click on the Macro icon and run the macro named Master for the current workbook.
6. In Page Layout, modify the report title in the header and footer to reflect the System name and Version number.
7. Save the Excel file with the appropriate report name.
8. Save or export the appropriately named PDF file.

At an appropriate time, work with Tammy Ulmholtz to post these reports to the NASIS download page.

This process works fine for all the reports except NREPO-Style Metadata - Table Column Desc – Excel to PDF. Use the following procedure for this report.

**WARNING:** This process is convoluted and not always successful the first time it is tried. I will try to guide you through the procedure as best as I can.

NREPO-Style Metadata Table Column Desc report procedure:

1. In NASIS, run the report, NREPO-Style Metadata - Table Column Desc - Excel to PDF. There are two parameters (selected from drop down choice lists). They are:

System Version

Metadata Version

For a NASIS System report use the following as applicable:

System Version - system of interest. Works for all Systems. Required.

MetaData Version - METADATA 2.0.2 - Required

Experience has shown that when trying to save the end result of the macro used in the ...BLANK-1.xlsm workbook is not always what is expected. This workbook has been shown to have problems when there are a large number of tables and columns. As a work-around, until the error is isolated and fixed, two Excel workbooks are actually used to produce this report.

The report will run and be displayed in the default browser.

Two Excel workbooks are required to process this report. They are named below.

NREPO-Style Metadata - Table Column Desc - Excel to PDF

NREPO-Style Metadata - Table Column Desc - BLANK-1.xlsm

NREPO-Style Metadata - Table Column Desc - BLANK-2.xlsm

1. Open the Excel workbook named: NREPO Table Column Desc - BLANK-1.xlsm
2. Switch back to the browser tab holding the NASIS report output.
3. Select the entire report and then copy it. Using Ctrl-A and Ctrl-C usually works.
4. Switch back to the BLANK-1 Excel workbook. With the cursor in cell A1, paste what was just copied, Ctrl-V works best.
5. Make sure the Developer Ribbon Tab is selected, then click on the Macro icon and run the macro named Master for the current workbook. This macro takes quite some time. Experience has shown that it takes from 1 to 2 hours to run when there are a large number of tables and columns. **NOTE: Excel takes over your computer. Meaning you may be able to switch to a different running program but you won't be able to do anything.**
6. The result of the macro should be that there are three columns (A, B, and C) with data in them.
7. Open the Excel workbook named: NREPO Table Column Desc - BLANK-2.xlsm
8. Switch back to the Excel workbook named ...BLANK-1.xlsm.
9. Select / Highlight columns A, B, and C. Copy this selection, Cntl-C works best.
10. Switch back to the Excel workbook named ...BLANK-2.xlsm. With the cursor in cell A1, paste what was just copied, Cntl-V works best.
11. Stay in the Excel workbook named ...BLANK-2.xlsm. Make sure the Developer Ribbon Tab is selected, then click on the Macro icon and run the macro named Master for the current workbook.
12. In Page Layout, modify the report title in the header and footer to reflect the System name and Version number.
13. Save the Excel file with the appropriate report name.
14. Save or export as an appropriately named PDF file.

These reports include all tables and all columns. Including system tables and columns, such as, lock tables. System tables and columns aren't visible to NASIS users. Including these system tables and columns tends to confuse most NASIS users. So, for NRCS users, consider using another set of reports that exclude those system tables and columns from the report. There is another version of each report that only includes visible tables and columns. Run those and notice the difference. Each of the visible versions has 'Vis' in the name. Such as NREPO-Style Metadata – Tables and Cols Vis – Excel to PDF.

There are quite of number of NREPO reports that don't create QA reports or Metadata reports. Run them and see if you might have a use for them. They will be useful to show the results of what you've done and as checks to make sure you've done what you actually intended to.

APPENDIX A – Information about Calculations.

**Run these calculations in the order listed.**

**Do these calculations by system with only one system in the selected set.**

These are **Folders|Calculations** in the **Calculations Site**.

**FOLDER:** Attribute

**Calculation:** Update attribute ID

**Explanation:** Populated Attribute ID column when it was NULL.

Using the UPDATE ATTRIBUTE ID WHERE ID IS NULL calculation.

**FOLDER:** Domain

**Calculation:** Update Domain ID

**Explanation:** Populated Domain ID column when it was NULL.

Using the UPDATE DOMAIN ID WHERE ID IS NULL calculation.

**FOLDER:** Index Master Id

**Calculation:** Update Indexmaster ID

**Explanation:** Populated Indexmaster ID column when it was NULL.

Using the 1-UPDATE Indexmaster ID WHERE ID IS NULL calculation.

**Calculation:** Generate column constraintorindexname

**Explanation:** Generated the Column named: constraintorindexname for those columns that were missing.

Using 2-Generate Column: constraintindexname. calculation **Calculation:** updated indexcolumn and indexcolnames

**Calculation:** update uniqueindex column

**Explanation:** Updated indexcolnum (Number of Columns) and Index Column Names.

Using 3-Update indexcolumn & indexcolunames calculation.

**FOLDER:** Relationship Master

**Calculation:** Update relationshipmaster ID

**Explanation:** Populated relationshipmaster ID column when it was NULL.

Using the 1-UPDATE Relationshipmaster ID WHERE ID IS NULL calculation.

**Calculation:** General foreignkeyconstraintname

**Explanation:** Generated the Column named: foreignkeyconstraintname for those columns that they were missing.

Using 2-Generate Column: foreignkeyconstraintname calculation.

**FOLDER:** System Table

**Calculation:** DAG Level 1

**Explanation:** Deleted current DAG Level.

Using DAG Level - 1. Delete Current DAG Levels calculation.

**Calculation:** DAG Level 2

**Explanation:** Generated DAG Level.

Using DAG Level - 2. Assign New DAG calculation. Follow instructions given in this calculation.

**Calculation:** Update Table Id

**Explanation:** Updated Table ID where ID is null.

Using Update Table ID where ID is null calculation.

**FOLDER:** Table Column

**Calculation:** Assign Alignment

**Explanation:** Populated Alignment column where Alignment was null.

Using Assign Alignment calculation.

**Calculation:** Update tablecolumn ID

**Explanation:** Populated Column ID where null.

Using Update Tablecolumn ID where ID IS NULL calculation.

**FOLDER:** Unit of Measure

**Calculation:** Update UOM ID

**Explanation:** Populated Unit of Measure Id when null.

Using Update Unit of Measure ID where ID IS NULL calculation.