NIST CYBERSECURITY FRAMEWORK (1.1)
TRACKING EVALUATIONS USING AN EXCEL WORKBOOK

User Guide | 6.0 | April 22, 2022

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SUMMARY

This is a companion user guide for the Excel workbook created by Watkins Consulting to automate tracking and scoring of evaluation activities related to the NIST Cybersecurity Framework version 1.1 April 2018 (CSF) [1] with NIST 800-53 rev 5 [2] controls and FFIEC Cybersecurity Assessment Tool mapping [3]. The workbook supplements this to include risk management information for each CSF subcategory. Also, as an aid to defining risk management by subcategory, it is possible to construct your risk model from sets of controls. For instance, you can construct a risk model for a particular CSF subcategory from the 800-53 Rev. 5 controls implied from the CSF tier.

This user guide assumes that NIST CSF and the relevant informative references are used to determine your firm's appropriate cybersecurity risk management approach. This workbook is only intended to facilitate the tracking of that work.

This user guide describes how to use the Watkins Consulting Excel workbook. It does not discuss how to perform a risk assessment or manage risks. If you need help using the workbook or interpreting the results, Watkins Consulting can help your firm with the workbook. Our team can also help with cybersecurity governance issues and assessments.

The ideal audience for this tool may be a risk practitioner, a small business just starting its cybersecurity risk management practice, a small group managing risk, or a student. Since it is Excel based, managing enterprise risks becomes challenging as additional staff interact with the tool.

What is new in version 6?
The 800-53 Rev. 5 informative references have been added. To help with the task of tracking and evaluating the controls used to manage risk at the sub-category level, a controls builder has been added. Groups of controls can be combined into a single score. This is a stand-alone tool whose results can be manually added to the CSF sub-category risk analysis. If it proves to be helpful, future versions of this tool could add that automation step.

The controls builder can be used in other ways. For instance, it can be used to track controls related to specific business risks, for instance ransomware. The builder worksheet is unlocked so it is possible for you to implement your own approach to analyzing risk. For example, it would be possible to add in cost-benefit analysis.

Contents

VERSION HISTORY

User Guide Version	Excel Workbook Version	Date	Author	Change
1.0	1.02	4/18/2017	JMJ	Initial Version
2.0	2.2	1/16/2017	JMJ	Updates to match 2.2: added in 800-53 and FFIEC CAT, VBA macros
3.1	3.1	2/21/2018	JMJ	Updated for risk management section.
3.11	3.1	3/15/2018	JMJ	Clarified paste-as-value and columns/fields language
4.0	4.0	9/6/2018	JMJ	Updated for CSF 1.1 and workbook 4.0 updates.
4.1	4.02	10/26/2018	JMJ	Added Appendix A: Compare NIST Workbooks
4.2	4.02	1/16/2019	JMJ	Updated Risk Gap definition for clarity and corrected maximum risk cell reference to AA8 from Z8 (thanks to HC for these fixes).
4.5	4.5	3/15/2019	JMJ	Added a table of contents, information about "copy from all files button/macro", new clear all feature
6.0	6.03	4/22/2022	JMJ	Added 800-53r5; Controls Builder

OBTAIN

The Workbook is available from the Watkins Consulting website, http://www.watkinsconsulting.com/NIST-CSF.html. This user guide is the companion for workbook version 6.03

REGISTER

We recommend that you send us an email using the registration link (*Information* worksheet, `cells A7:B8`). We will not share your information outside of our organization and after confirming your registration, we will notify you of any updates or potentially helpful information related to the workbook.

ORGANIZATION

The Workbook has eleven visible worksheets.

- **Information**: describes the workbook and has some formatting controls.
- **Rollup**: summarizes the status value by category.
- **CSF Core with Risk Register**: Contains the functions, categories, sub-categories, and informative references [1].
- **Print Subcategory**: Summarizes the risk register information for one subcategory.
- **Controls Builder (BETA)**: Facilitates building sets of risk controls to manage a risk. This is a new feature and is in development.
- **CSF Alt View App A**: A reference table listing the informative references for each sub-category. It has been updated to include CSF 1.1 and 800-53 Rev. 5.
- **800-53 Revision 5**: an improved interactive reference for 800-53 Rev. 5 controls.
- **800-53r4 Controls**: an interactive reference for 800-53 Rev. 4 controls.
- **FFIEC CAT Core Map**: automatically maps the *CSF Core* responses to the FFIEC CAT June 2015 mapping [3].
- **CSF 1.1 from NIST**: verify that the text presented matches the CSF text.
- **CSF to SP 800-53r5**: work done to update the CSF informative references with 800-53 Rev. 5.

There is also one hidden worksheet, *References*, which contains tables used to make the workbook flexible and responsive (user input validation lists, etc.).

HOW TO USE THE WORKBOOK

Macros have been added to the Excel workbook to help with the 800-53 controls look-up and to allow the two status methods to co-exist. Depending on your Excel settings you may be prompted with a security warning to Enable Content. Please allow macros to be enabled.
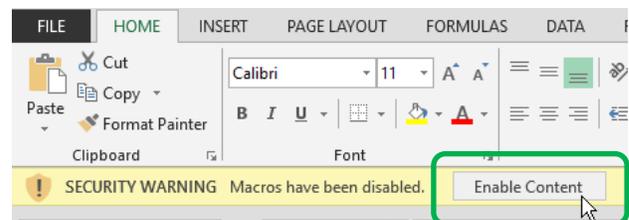
GENERAL APPROACH

The workbook is organized to collect risk information about each subcategory. Starting with the *CSF Core with Risk Register* worksheet, enter your general information at the top and then proceed through the 108 subcategories. You can fill in just the tracking information or the risk register information. As the information is added, the Rollup worksheet is updated.
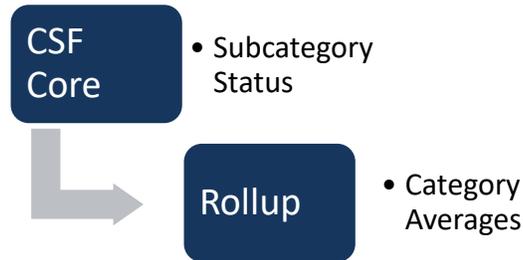
Start with the *CSF Core with Risk Register* worksheet

To facilitate your record keeping, there are four input fields at the top of the *CSF Core* worksheet. These are shown in Figure 1.

- Assessment date, will be shown on *Rollup* worksheet.
- Firm name, will be shown on *Rollup* worksheet.
- Responsible Party
- General Notes

Although there is no standardized way to evaluate your firm's approach to applying the framework to your cybersecurity strategy, this workbook uses an implied approach. It is designed to review each of the 108 subcategories found on the *CSF Core with Risk Register* worksheet. For each subcategory, you can input the status of your firm's cybersecurity practice, perhaps as informed by the informative references for each subcategory.

This workbook allows two methods to describe the subcategory status: binary (yes or no) and senary (0-5). The binary method is the default. If you want to switch to the senary method, please do so before changing the `Status` column cells (or you can reset the fields to blank after changing methods). To switch between the two methods, select the desired method on the *Information* worksheet in the controls region, cell `A41`. If you do change the method, please change the shading cutoff values for the Rollup worksheet in cells `A37:A38` (typically .33 and .66 for the binary method and 2 and 4 for the senary method).

Binary: Yes/No	Senary: 0–5
• **Yes**	• 0
• **No**	• 1
• **N/A**	• 2
• **Blank**	• 3
	• 4
	• 5
	• N/A
	• Blank

As you begin, all the response values are set to "blank." This will indicate that the subcategory has not been reviewed. For sub-categories that do not apply to your firm answer "N/A." For the binary methods when your evaluation, your firm has adequate risk controls in place or accepts the level of risk for the subcategory then answer "Yes". If not, then answer "No." Likewise for the senary method, use your risk evaluation to scale the risk control as an integer from 0 to 5. Figure 1 depicts a screen capture of the worksheet for the ID.AM-1 subcategory.

In addition to setting the `Status` column (`column E`), specific details may be added to the `Notes` column (`column H`).

Warning!   ***Please use the paste-as-value functionality if you are pasting "Status" values; otherwise, the worksheet could work in an unpredictable manner due to validation errors. Also, invalid values will invalidate the copy action.***
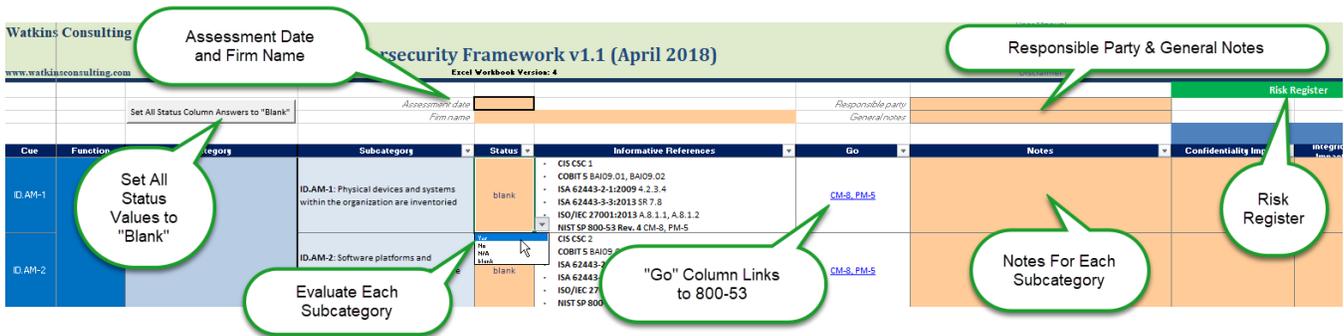
Figure 1 A partial view of the *CSF Core* worksheet. The first subcategory in the Identify (ID) function's Asset Management (AM) category is shown. The drop-down for the `Status` cell shows the allowed answers: yes, no, N/A, and blank for the binary input method. A note may be added for each subcategory. It is also recommended that the assessment date, assessor and firm name for the overall evaluation be recorded. Image shown is for workbook version 4.0.

The "Go" Column: Hyperlinks to the Risk Controls

When assessing each subcategory, if the NIST 800-53 Rev. 5 controls are of interest, it is possible to use the `Go column` hyperlink to view the controls for the subcategory. Click on the hyperlink to display the *800-53 Controls* worksheet, the controls list will be filtered to display the appropriate control(s).

Similar functionality is available for the NIST 800-53 Rev. 4 controls. To switch the go links from revision 5 to revision 4, change the control in `cell A52` on the *Information* worksheet from "Rev. 5" to "Rev. 4." The selected revision will be show on the *CSF Core with Risk Register* worksheet in `cell G8` just above the "Go" column.

Excel hint: since the informative references use intra-workbook hyperlinks, it is convenient to use `F5 + Enter` to switch between worksheets.

Reset All Status Field Responses to Blank

THE FOLLOWING ACTION CANNOT BE UNDONE. The undo button will not work to restore values erased by this macro. So please backup your work in another workbook before resetting the values.
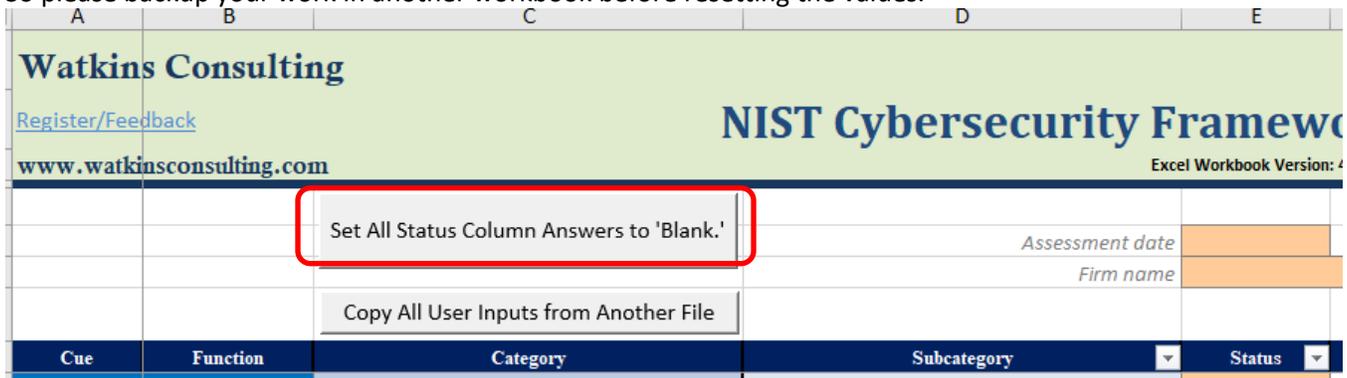
Functionality to reset all the responses to the blank state is provided by a button, located near `cell C6`, labelled `Set All Status Column Answers to "Blank"`. To reset all the status input cells to "blank" values, click the reset button and then click the `Yes button` in response to the "Are you sure" question.

You can change the button action by toggling the macro control option in the controls section on the *Information* worksheet, cell `A55`. "`Blank`" is the default and "`All`" is the toggle value. Switching to "`All`" will cause all user input values on the *CSF Core with Risk Register* worksheet input fields to be reset.

This macro does not affect the controls builder.

Copying All User Inputs from Another File

THE FOLLOWING ACTION CANNOT BE UNDONE. The undo button will not work to restore values erased by this macro. So please backup your work in another workbook before resetting the values.
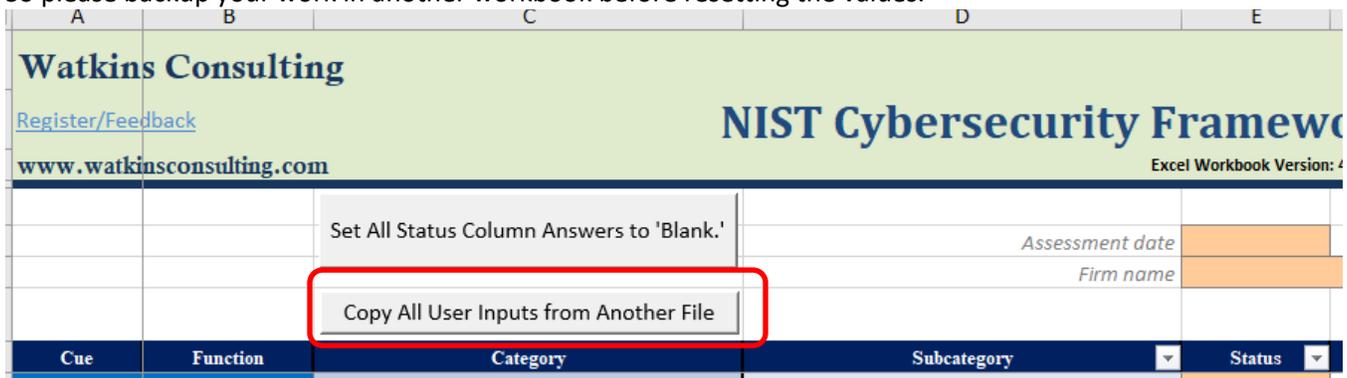
This macro will copy values from other Watkins NIST CSF workbooks. Earlier versions do not have risk registers and NIST added ten sub-categories from version 1.0 to 1.1. This macro copies matching values, if available, and does not change the other input values.

This macro does not copy over the controls builder inputs.

Risk Management

To the right, `columns I:AJ`, of this basic tracking functionality 28 columns/fields have been added to help facilitate risk management actions taken for each subcategory. These are summarized in the table below.

These optional fields are designed to track your risk management strategy, the baseline risk, the effect of current controls, the current risk, the goal and the gap between the current state and the goal. To aid in prioritization of resource allocation, estimated losses associated can be calculated for the baseline and current state. Also, to help relate the current effectiveness of the controls, the user can enter a formula in the `Status Calculation` column to calculate a "Status" value. This can then be copied and **pasted-as-value** into the `Status` column (use of this is optional and it does require Excel expertise). A sample formula has been included.

Field	Function	Purpose
Confidentiality Impact (baseline)	User Input	Evaluation of confidentiality impact: Low, Medium, High.
Integrity Impact (baseline)	User Input	Evaluation of Integrity impact: Low, Medium, High.
Availability Impact (baseline)	User Input	Evaluation of Availability impact: Low, Medium, High.
Security Category (Risk Impact baseline)	Calculation	Maximum of CIA impacts.
Risk Likelihood (baseline)	User Input	Evaluation of risk likelihood: Low, Medium, High.
Risk (baseline)	Calculation	Security Category (Risk Impact) and Likelihood values are mapped to a numerical score based on information worksheet control `cells A44:A45` and then multiplied. For instance, a "Low impact" and a "High likelihood" for a scaled 1-3 basis would be evaluated as a 3=1*3. [2, p. 28]
Risk Strategy	User Input	Preferred strategies are limited to: avoid, accept, mitigate, transfer, and other.
Control Description	User Input	Describe your control(s).
Compensating Control Description	User Input	If the controls associated with this risk are supplemented by other controls, describe those controls here.
Controlled Confidentiality Impact (current state)	User Input	Evaluation of confidentiality impact with controls in place: Low, Medium, High.
Controlled Integrity Impact (current state)	User Input	Evaluation of integrity impact with controls in place: Low, Medium, High.
Controlled Availability Impact (current state)	User Input	Evaluation of availability impact with controls in place: Low, Medium, High.
Controlled Impact (current state)	Calculation	Maximum of controlled CIA impacts.
Controlled Likelihood (current state)	User Input	Evaluation of controlled risk likelihood: Low, Medium, High.
Controlled Risk (current state)	Calculation	Same as risk calculation but using controlled risk impact and controlled likelihood.
Risk Reduction Controlled Risk – Risk (current state – baseline)	Calculation	Controlled risk minus the uncontrolled risk (negative is better).
Risk Goal	User Input	Risk goal for this subcategory.
Risk Gap	Calculation	Controlled risk – risk goal (smaller is better). Will display "--" for a blank risk goal or a negative gap; "--" is the default value for no calculation.

Field	Function	Purpose
Potential Loss at Maximum Risk	User Input	Evaluation of the maximum loss associated with this subcategory **when risk impact and likelihood are both High**. Set to 100 to simulate percentage but should reflect importance to firm relative to other sub-categories. Note, `cell AA8` shows the maximum risk, which is the High numeric score mapping value squared.
Uncontrolled Loss (baseline)	Calculation	Potential loss at maximum risk multiplied by the fraction of (risk-risk minimum)/risk range. This fraction should scale the risk as to 0% at the minimum value to 100% at the maximum value. Example, if risk is Low and likelihood is High when the mapping values are 1 for Low and 3 for High, the Risk is 3=1*3, which is 33% of the maximum risk scale, 9=3*3. So, for a maximum potential loss of 100, the uncontrolled loss would be 33.
Controlled Loss (current state)	Calculation	The same calculation method as for uncontrolled loss, but using controlled loss as the input to the fraction.
Loss Benefit	Calculation	The percentage of the change in loss as calculated from (Uncontrolled Loss – Controlled Loss)/Uncontrolled Loss. 100% is the best. Errors result will be shown as a hyphen.
Control Implementation Date	User Input	Help to identify the control by entering the date here.
Status Calculation	User Input	A way to automate the calculation of the status field, which can then be manually copied (by value) to the status field. Invalid values will break the copy action. Enter your Excel formulas here to calculate how you define the status for your controls. There is a sample formula to start off. It uses comparisons to values set in the *Information* worksheet `cells A47:A51`.
Risk Owner	User Input	Risk owner's name.
Audit Reference	User Input	If applicable, the audit used to determine the risk control(s)' effectiveness.
Assessment Reference	User Input	If applicable, the assessment used to determine the risk control(s)' effectiveness.
Risk Management Status	User Input	Any additional information about the risk management progress.

Table 1 risk register fields.

The Rollup Summary

The *Rollup* worksheet summarizes the subcategory status responses by category and function, providing a summary of which sub-categories have been evaluated. The Rollup is only intended to help measure the scoring with respect to the binary or senary values. The binary method is scored from 0%-100% while the senary method is scored from 0-5. For both calculations a single dash, "-", indicates that too few sub-categories have been assigned from the "blank" initial state (controlled by the minimum number of question level set in the *Information* worksheet, cell A36) while a double dash, "--", which indicates an error condition in the calculation.

Binary Method: Yes/No	Senary Method: 0-5
Displays a percentage of the status values that have been set to "Yes" without including the	Average of all the values that are not marked as N/A, with "blank" values evaluated as zeros. Should result in a value from 0-5.

not-applicable sub-categories. The formula used is:

$$Score = \frac{Nyes}{Nyes + Nno + Nblank} \quad [1]$$

This is equivalent to:

$$Score = \frac{Nyes}{Ntotal - Nn/a} \quad [2]$$

$$Score = \frac{N_1 + 2*N_2 + 3*N_3 + 4*N_4 + 5*N_5}{N_0 + N_1 + N_2 + N_3 + N_4 + N_5 + Nblank} \quad [3]$$

Optionally, the scoring may leave out the unanswered, "blank" questions; this is controlled with `cell A46` in the controls section on the *Information* worksheet.

Warning—*this score may have little relationship to the actual risk that your firm is exposed to in each category*. But it can provide a helpful visual snapshot of the status of your evaluation progress.

The Print Subcategory Worksheet

To facilitate printing of the risk register information for each subcategory, the *Print Subcategory* worksheet has been added to the workbook. One subcategory may be printed at a time.

You can select the subcategory directly from the dropdown, or you can use the cascade to limit the dropdown choices by first selecting the function, then the category, or even by just selecting the category. Once the subcategory is selected, the information from the *CSF Core with Risk Register* worksheet is displayed and may be printed. You can't enter the data from the *Print Subcategory* worksheet.

Controls Builder-BETA (in development)

Weaknesses of the approach to managing risks at the sub-category level is that the sub-categories may use several risk controls and sub-categories are directly relevant to perceived business risks. Using the controls builder, it should now be possible to document what specific controls are used to manage its risk. The worksheet currently uses a weighted approach to combine the controls into a single score. Since this worksheet is unlocked, you can develop your own scoring. The controls builder is not tightly tied to the CSF workbook. Results from the builder need to be manually copied to the sub-categories in the *CSF Core with Risk Register* worksheet. This offers the flexibility of tracking other sorts of risks, like business risks which are usually easier for the business to relate to when deciding the value of risk control investment.

To use the controls builder, enter a risk description, `column A`. Add in the uncontrolled risk information for the impacts to the confidentiality, integrity, and availability (`B,C, and D`). Then enter the risk likelihood (`E`) and the risk strategy (`H`). The controls are entered starting at the "Control Type" (`J`). Available control types are: combination, CSF sub-category, 800-53 Rev. 5 control, compensating, or other.

Control Groups or Combinations

If your control is a group of controls, select "combination." Then enter the controlled risk goal (`AA`) and the maximum loss of an uncontrolled risk (`AC`). Optional fields include the control implementation date, the risk owner, the audit reference, the assessment reference and the risk management status fields. You shouldn't try to enter anything for controlled CIA impacts or the controlled risk likelihood. When you select "combination" macros add weighting formulas for those cells. The inputs to those weighting formulas are taken by adding related, specific controls to the table. Since the worksheet is unlocked, you can update the weighting formulas as needed.

Warning: if you do update the formulas, *do not reselect the control type* as a macro will overwrite your customized formulas with the original weighting formulas. It is recommended that you save your work frequently.

Simple weighting may not adequately describe the interaction of the controls. Future versions of the controls builder may have the capability to select among various weighting formulas (especially if you share your methods with us, we will share them with the rest of the cybersecurity community).

To add a related control, repeat the risk description, and then select the control type. Enter your estimates for the effectiveness of the control (the changes to the CIA impacts or risk likelihood) and the weighting for this control (`column O`). As additional controls are added the weights are summed together and the effectiveness of each control is assumed to apply proportionally to the overall combined effectiveness.

Reference Material Worksheets

800-53 Controls

Revision 5
This worksheet can be used independently of the hyperlinks from the *CSF Core* worksheet. If `cell B11` is changed, the table is filtered by that value (for example, entering "AC-1, AU-3" without the quotes will cause the table to be filtered to only those two controls). Since many of the controls are related, it is possible to switch between related controls by selecting the links in `column F`, "Show Related Controls." If this feature is used, a new link is shown in `cell C11` which when clicked will return to the previous filtered view.

Revision 4
This worksheet can be used independently of the hyperlinks from the *CSF Core* worksheet. It is a reformatted version of the NIST material with an extra field, "Control" in `column B`, that can be used with the Excel filter function. Or, the filter control input, `cell B11`, can be used to set the filter inputs by entering the desired controls in a comma delimited list (for example, "AC-1, AU-3" without the quotes).

Cybersecurity Assessment Tool Mapping
There is no user-interactive functionality in this worksheet. It simply reports the CSF subcategory assessed value in `column E` as defined by the mapping of the subcategory, `column D`, to the FFIEC CAT declarative statement, `column F`.

TECHNICAL CONSIDERATIONS

Warning—Use Paste-As-Value Functionality for The Status Field

The normal Excel copy or cut and paste functionality may not work as anticipated because of the underlying data validation. Use the paste-as-value option. Attempting to paste invalid values can result in unpredictable values.

Controls—Format the Shading

There are three controls that affect how the scoring is displayed. They are in the *Information* worksheet in cells `A36:A46`. The controls and their default values are as follows.

1	*Minimum number of questions to answer for roll up score to be calculated*
0.33	*All category rollup scores below this value are shaded in* red
0.66	*All category rollup scores above this value are shaded in* green

Answers falling between the green and red scores are shaded in yellow. If you want to turn off the conditional shading, set the minimum number to at least 13, which is one more than the maximum number of sub-categories found in any category.

The red, yellow, and green shading is arbitrary and should be adjusted to fit your firm's level of risk acceptance. These are related to the scoring method selected and should be changed when the scoring method is changed.

Assessment Date Limits

To improve the quality control of user inputs, an acceptable date range for the assessment date may be specified in the controls. The default is a very wide range.

1/1/2010	*first allowed assessment date*
12/31/2030	*last allowed assessment date*

The assessment date is also verified to be a date input.

Scoring Method

Select the desired scoring method

yesNoNA	*select the scale for answers (should also select desired rollup shading values above)*

Output Controls

The values shown for calculation errors and where inputs have not been defined may be updated here.

-	*Calculation Error Output*
--	*Calculation None Output*

Risk Scaling

Set the low and high numeric equivalents for risk and likelihood numeric calculations.

1	*Low Numeric Score (must be >0)*
3	*High Numeric Score (must be greater than low score)*

Counting Blanks in the Scoring

This Yes/No option controls if "blank" values are included in the averages as a No or zero.

Yes	*Include "blank" count in score calculation*

Calculating the Status Field

`Column AF` in the *CSF Core with Risk Register* worksheet and `column AH` in the *Controls Builder* worksheet can be used to customize a formula to calculate the status field based on your risk management controls. A sample

formula is included. To facilitate generalized formulas, it is recommended that formula constants be set to refer to these five user variable fields.

30	**User Variable 1:** *yes/no break; 5 break*
	User Variable 2: *4 break*
	User Variable 3: *3 break*
	User Variable 4: *2 break*
	User Variable 5: *1 break*

The sample formula is:

```
=IFERROR(IF(scaleType="yesNoNA",IF([@[Controlled Loss]]<userV1,"Yes","No"),IF([@[Controlled
Loss]]<userV1,5,IF([@[Controlled Loss]]<userV2,4,IF([@[Controlled Loss]]<userV3,3,IF([@[Controlled
Loss]]<userV4,2,IF([@[Controlled Loss]]<userV5,1,0)))))),calcError)
```

Using the sample formula and the senary scoring option, with a `Potential Loss at Maximum Risk` of 100, the user variables could be set to 15, 30, 45, 60, and 75 to bucket the losses into 5 (best), 4, 3, 2, and 1 (worst) status categories.

Toggle Switch for Clearing All User Input Fields on the CSF Core with Risk Register Worksheet

This switch controls which user fields are reset to their initial value by the macro associated with the reset button on the *CSF Core with Risk Register* worksheet. You can toggle between "`Blank`" and "`All`" where "`Blank`" clears on the status field values, and "`All`" which also clears the risk register.

This field is not updated when copying all user inputs from another file.

Blank	*clear contents button: set to '**Blank**' to reset status fields to blank on button press or set to '**All**' to set all status field entries to blank and blank all user input on the Rollup tab*

Protection—only the input cells should be changed

The Workbook is password protected to maintain formula integrity and textual information. Only cells displayed as input cells (orange background, dark purple text, grey border) are unlocked. If your firm needs a special version of the workbook or has suggestions for improvements, we are open to making those updates.

Macros

Previous versions of the Workbook were macro free; however, to eliminate some of the tedium associated with this large workbook macros were added. If you have questions about the macros, please contact us.

APPENDIX A COMPARE NIST WORKBOOKS

A companion Excel workbook has been created to facilitate comparing Watkins Excel workbooks. This tool can be used for gap analysis.

How to Use the Workbook

The workbook opens to the *Core Comparison* worksheet. Using the default control parameters, click on the "Select Baseline" button to select the baseline NIST workbook. Enter an appropriate name for the data set. Then click on the "Select Comparison" button and enter a name for that data set. Additional models can be added by again clicking the "Select Comparison" button.
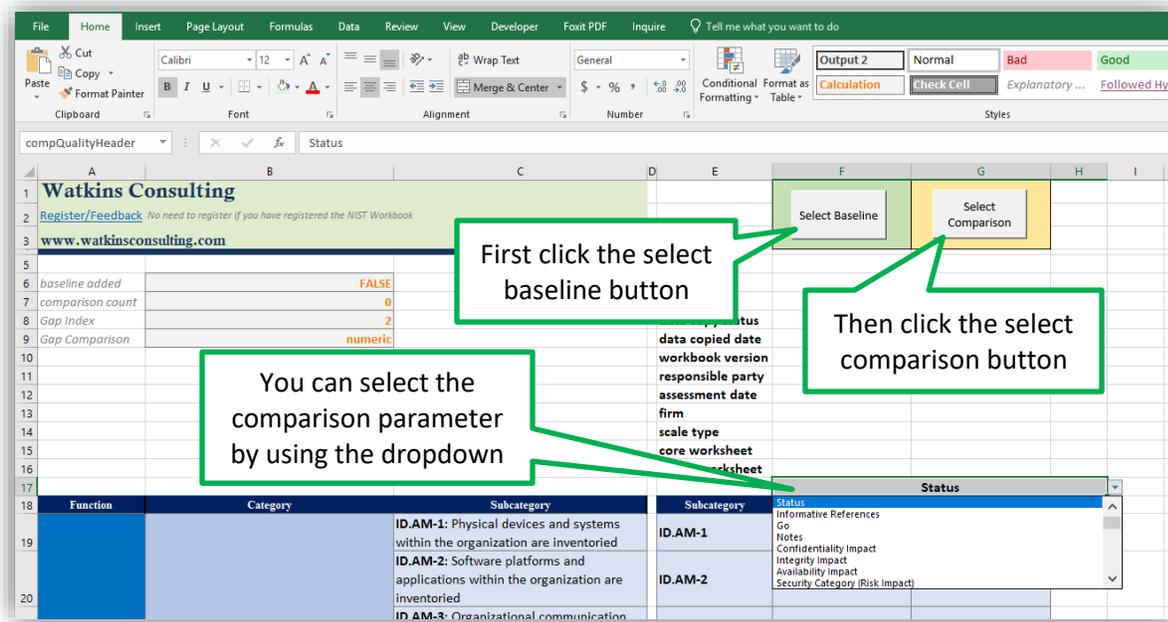
You can then select the desired comparison field by the shaded dropdown in cells `F17:H17`. The default is set to use the "Status" field. Based on the field selected, the workbook will either make a numeric or textual comparison, as indicated in cell `B9`. For the status field it makes a numeric comparison. For Yes/No answers, it uses values set on the Information worksheet in the controls section, cells `A50:A56` for the conversion values. The comparison is the comparison filed value less the baseline filed value.

$$Gap = Comparison\ Field\ Value - Baseline\ Field\ Value$$

If the field selected implies a textual comparison, if there is no change then the text "unchanged" is displayed; otherwise, the text "changed" is displayed.

Functional and category comparisons are made on the *Summary Comparison* worksheet. The same numeric gap calculation is shown, as well as the change from the baseline.

$$Change = \frac{Gap}{(Baseline\ Field\ Value)}$$

Charts of the function and category rollups are shown on the *Summary Charts* worksheet. A sample of the charts is shown below.
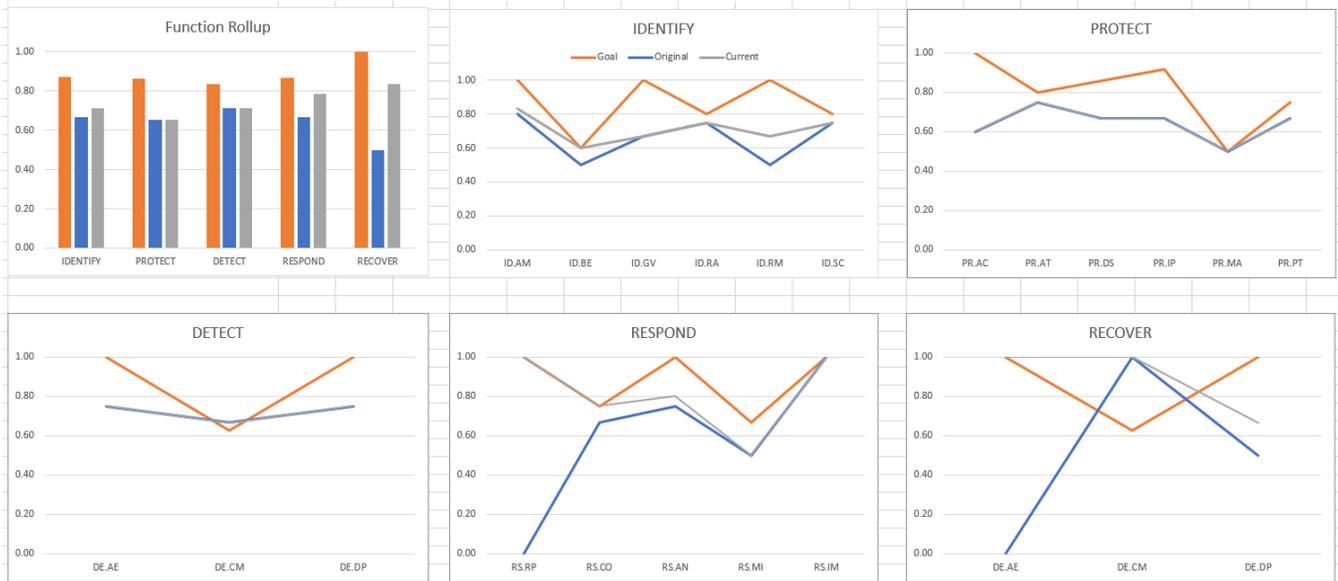
Tricks and Tips

The workbook includes macros and you may need to allow them to function, depending upon your Excel security settings.
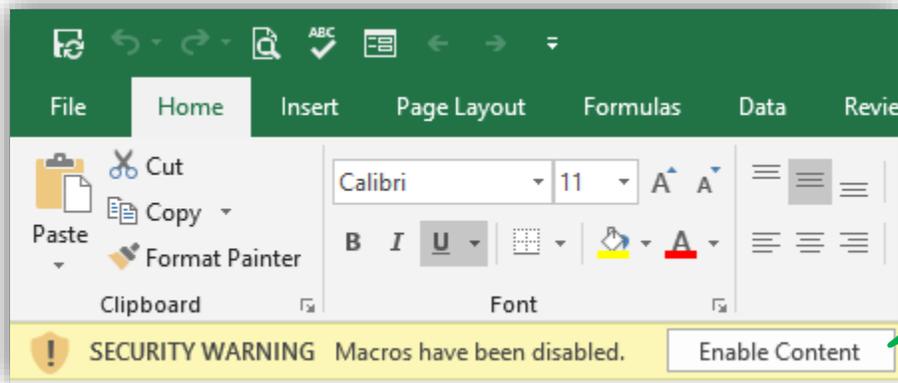
The workbook only works when macros are ENABLED.

Select a meaningful "nickname" for your workbook. This "nickname" will show up on the tables, the worksheet names, and on the charts.

Setting your goal workbook to be the baseline will provide an easier to understand gap calculation. But if you want to illustrate an improvement, use your original assessment workbook to be the baseline.

If you have selected the wrong baseline workbook, click the "Select Baseline" button again and replace it. This "trick" does not work for the comparison workbooks. If you use the wrong comparison workbook, it is probably easier to start over with a clean copy of the compare workbook.

The workbook has been designed without an explicit limit on the number of comparisons that can be made. Our largest test use case has the baseline and two comparison workbooks. If you want to have more than six comparison workbooks, you

Workbook Controls

You may want to adjust the comparison workbook. These are the available controls.

Controls

d-mmm-yyyy	*preferred date format*
Baseline Core	*local copy of the baseline core CSF worksheet name*
Baseline Rollup	*local copy of the baseline rollup worksheet name*
0	*number of file name characters to add to the baseline sheets (numeric method)*
Core	*local copy of the comparison core CSF worksheet name*
Rollup	*local copy of the comparison rollup worksheet name*
0	*number of file name characters to add to the comparison sheets (numeric method)*
2	*Offset counter for additional comparison files*
User Input	*Technique to differentiate between naming comparison workbooks*
blank	*On reading workbooks, if the subcategory is not available (v1.0 to v1.1) use this value*
N/A	*On reading workbooks, if the rollup category is not found, use this value*
Successful	*If data import has no errors, data status is set to this value*
---	*Error in Calculation (e.g., divide by zero)*
6	*Maximum number of workbooks to add to the charts*
0	*Comparison value for N/A*
0	*Comparison value for blank*
0	*Comparison value for No*
1	*Comparison value for Yes*
1	*Low*
3	*Medium*
9	*High*

WORKS CITED

[1] NIST, "Framework for Improving Critical Infrastructure Cybersecurity," NIST, Gaithersberg, MD, 2018.

[2] NIST, "NIST Special Publication 800-53 Revision 5," NIST, Gaithersburg, 2020.

[3] Federal Financial Institutions Examination Council, "FFIEC Cybersecurity Assessment Tool," Federal Financial Institutions Examination Council, Washington, 2017.