



# 2008 IAC student meeting

Washington, DC

February 8<sup>th</sup>, 2008

## *Improving Efficiency and Quality of IAC operations*

**Fadi Bejjani**

Industrial Assessment Center

San Diego State University

- Introduction:
  - *SDSU/IAC Background*
  - *A greeting from IAC San Diego*
  - *About me*
  - *The Idea & How it started*
- What is the tool?
- How to build/use the tool?
- Example: MH to T5 conversion
- Characteristics
- The impact on efficiency/quality
- The vision
- Summary



# Background

- SDSU/IAC started in 1991
- Conducted 405 surveys
- Director Dr. Beyene
- We serve the following counties:
  - *Arizona*
  - *Los Angeles*
  - *Orange County*
  - *San Bernardino*
  - *San Diego*



# A Greeting from Our Center!



# A Quick Word about Me!

- Fadi Bejjani
- Electrical engineer
- Mechanical engineer
- Interest in Programming
- Hobbies (But no time for that!!)



## Automation:

**Import** of **Excel data** into **Word document**

This eliminates calculation errors

and

helps conduct a more accurate editing

## **Note:**

**This is not a copy/paste procedure  
of previous or old files**



# Drive Behind the Idea

## Summary

- Sample ECO on IAC<sub>SD</sub> Website used as Template
- Report is proofread
  - Possible editing
  - Editing that might be painful and long

- There has to be a faster and easier way to edit

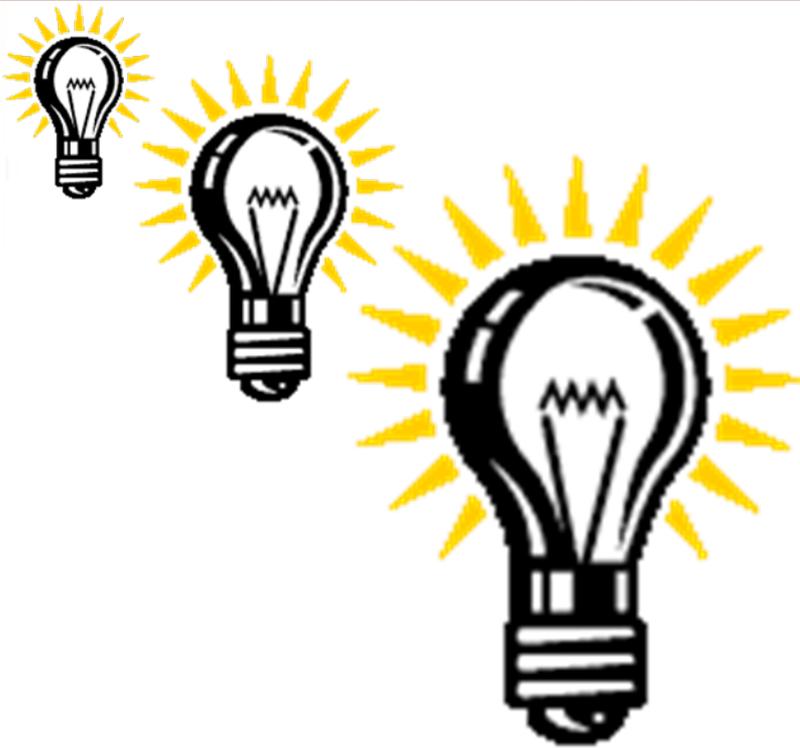
- Very helpful for new students

- Keep/improve the current standard of IAC report generation



# Eureka!!!

Summary



## Let's use Automation!!!



- No need to re-invent the wheel
- Use the power of others :
  - *Excel 2003*
  - *Word 2003*
- Automate Word document by creating a link with Excel



# Create the link

- Copy from Excel

Select Excel Cell

↳ Right Click

↳ COPY

- Paste into Word

Select where to paste

↳ Edit

↳ Paste Special

↳ Paste Link

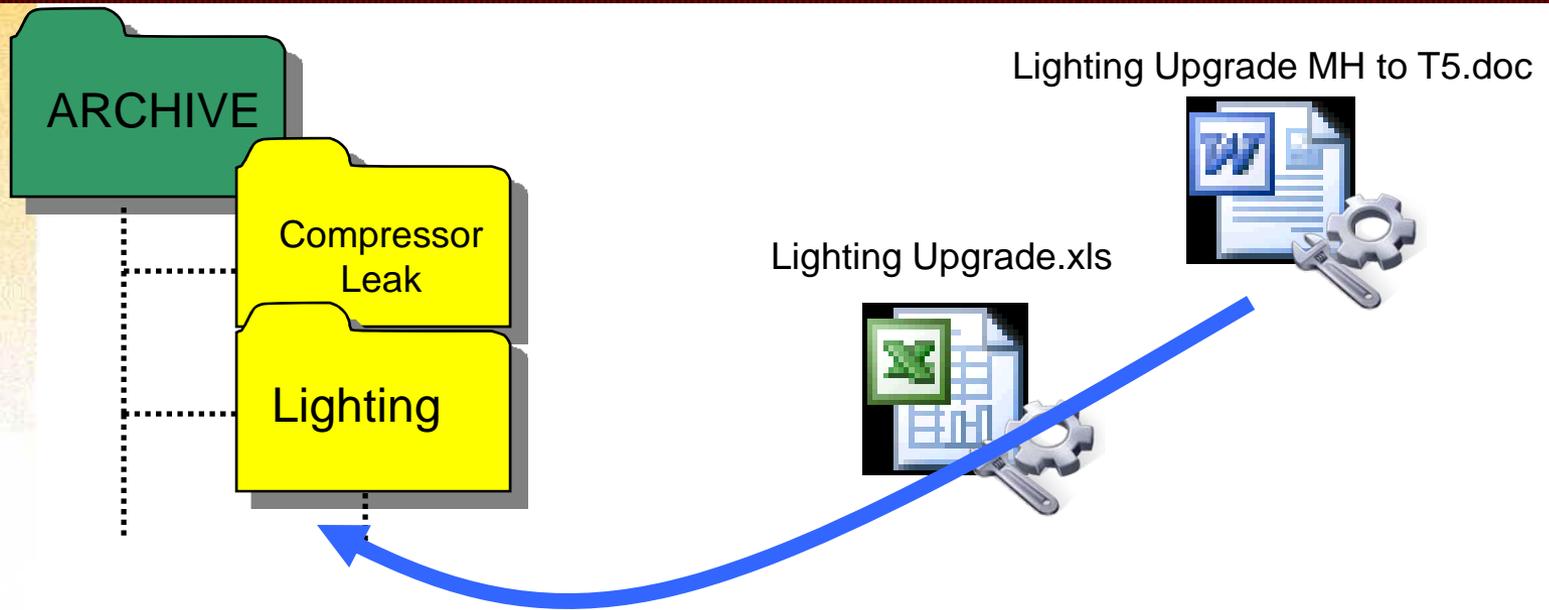
↳ Unformatted Text

↳ OK



# Engine Setup & Preparation

Summary

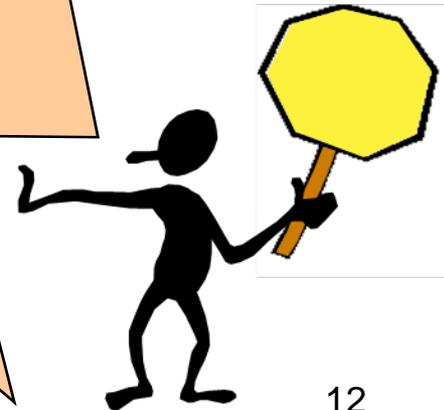


- Step1 : Create an Archive folder
- Step2 : Create a folder for each ECO
- Step3 : Start Excel, build it & save it in the ECO folder
- Step3 : Start Word document, build it and link it to Excel
- Step5 : Save Word document in the **same ECO folder**



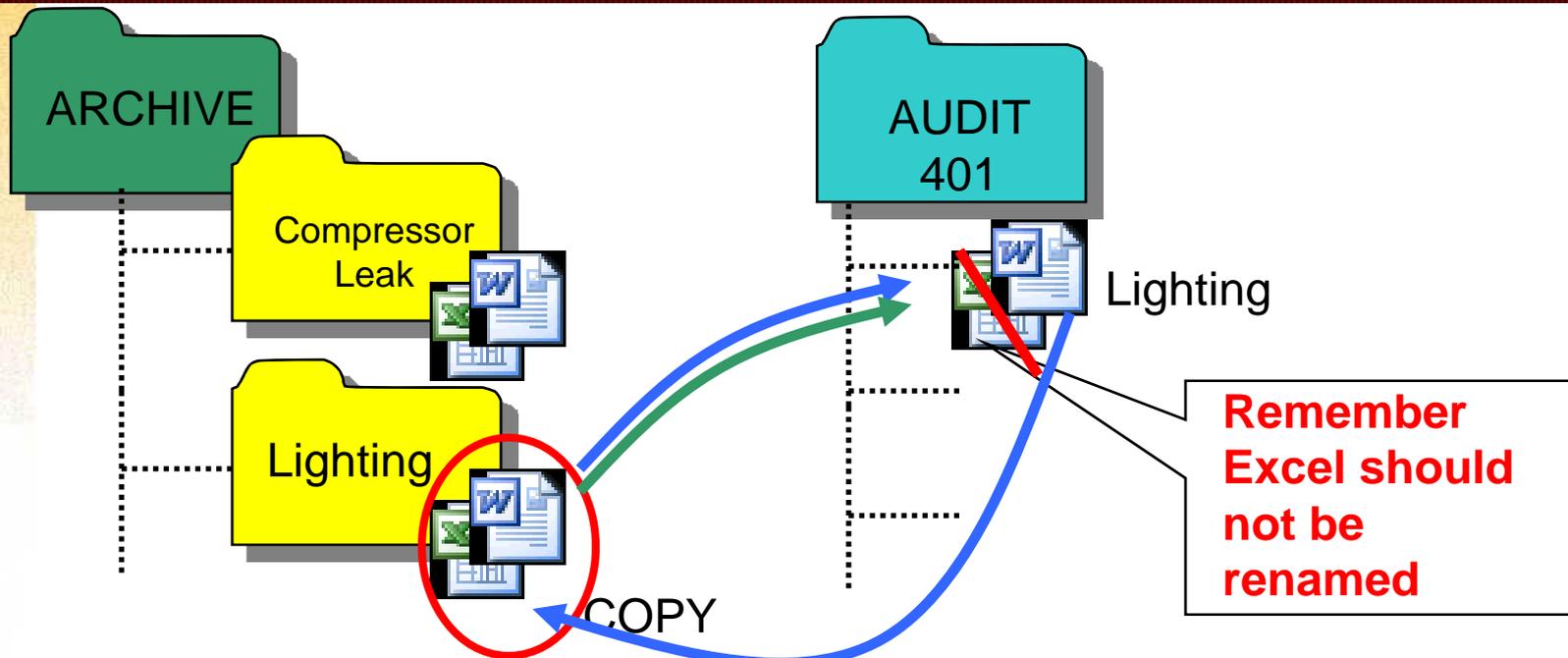
# Attention!!!

- Excel and Word document has to be in the **same** folder
- Excel file **cannot** be renamed
- Word file **can** be renamed



# Using the Tool

Summary



- Step1 : Create a folder for the audit
- Step2 : Copy Excel and Word into the audit folder
- Step3 : Fill up the Excel sheet
- Step4 : Open Word, select all, press F9, et **Voilà !**



# Example



Microsoft Office  
Excel Worksheet  
[Lighting Upgrade.xls](#)



Microsoft Word  
Document  
[401- Lighting Upgrade MH to T5.doc](#)



# Characteristics

- Easy to create
- Get the maximum out of a one day audit
- Fast report generation
- Provides flexibility
- Maintain uniqueness of the report
  - *IAC students will still have to fill specific information about the company for which the AR has been written for*



# The Impact on Efficiency

- Impact on students:
  - *New students integrate into the team faster.*
  - *Experienced student will get a depth of understanding*
- Faster report generation
- Improve IAC operations:
  - *During the drive home, discussion can be more intense – assuming you're still awake*



# The Impact on Quality

- Less mistakes
  - Accuracy of the calculation
  - More reliable editing
- Auto-numbering by maintaining bookmarks.
- Accuracy of data
  - *Information is still fresh.*
- More efficient data acquisition



# A Vision!

- IAC offers a lot of good tools found on DOE
- This is a new tool - at a center level
- IAC centers will be sharing and building a very useful Archive



## Today we looked at:

- [How the idea started](#)
- [The tool](#)
- [How to create it](#)
- [The setup of the engine/Archive](#)
- [Caution rule](#)
- [Using the tool/Example](#)
- The impact on [efficiency](#) & [quality](#)
- [The vision](#)

## QUESTIONS?



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