



K2's Supercharging Your Spreadsheet Collaboration

Course Description



Collaboration is a key to productivity and success. But remote work can make collaboration more challenging, including collaborating on spreadsheets. Fortunately, tools such as portals with check-in/check-out capabilities, version control, comment tracking, and co-authoring can enable online spreadsheet collaboration. Further, Excel's Inquire tool can facilitate spreadsheet collaboration in offline environments.

Don't let remote work hamper your spreadsheet collaboration needs! Participate in this session to learn how to collaborate on spreadsheets effectively from anywhere using tools you already own or license.

Learning Objectives



Upon completion of this course, participants should be able to perform the following tasks:

- Select various Excel features associated with collaboration
- List the steps necessary to use Excel's Inquire tool to identify differences between two spreadsheets
- Differentiate between the capabilities of Excel's Notes feature and its Comments feature
- Choose the correct definitions for key terms associated with file storage such as check-in/check-out and version control from a list of options

Overview Of Presentation



- Planning your collaborative session
- Collaborating over your office network: **Comments, Notes, Tracked Changes, and Custom Views**
- What you need to know about Microsoft's cloud storage tools: **Teams, SharePoint, and OneDrive for Business**
- Tracking and Comparing Versions of a Spreadsheet: **Check-out, Versioning and Inquire**



PLANNING YOUR COLLABORATIVE SESSION

Planning Your Collaborative Session



- On what do you need to collaborate with others?
 - Word, Excel, PDF, PowerPoint, more?
- Where are all of the people with whom you'd like to collaborate?
 - Inside your organization, outside your organization, or mixed?
- How many documents and people need to collaborate?
- Is it desirable to meet at the same time?

Planning Your Collaborative Session



- What tools are available to you and your collaboration team?
 - OneDrive (personal), OneDrive for Business
 - Teams
 - SharePoint
 - Adobe
 - Power Automate?
 - Secure portal application (e.g., Sharefile)
- Who will control the edits, and will there be multiple suggested values to work through?





Comments, Notes, Tracked Changes, and Custom Views

COLLABORATING WITH OTHERS

The Old Comments And New Notes Feature



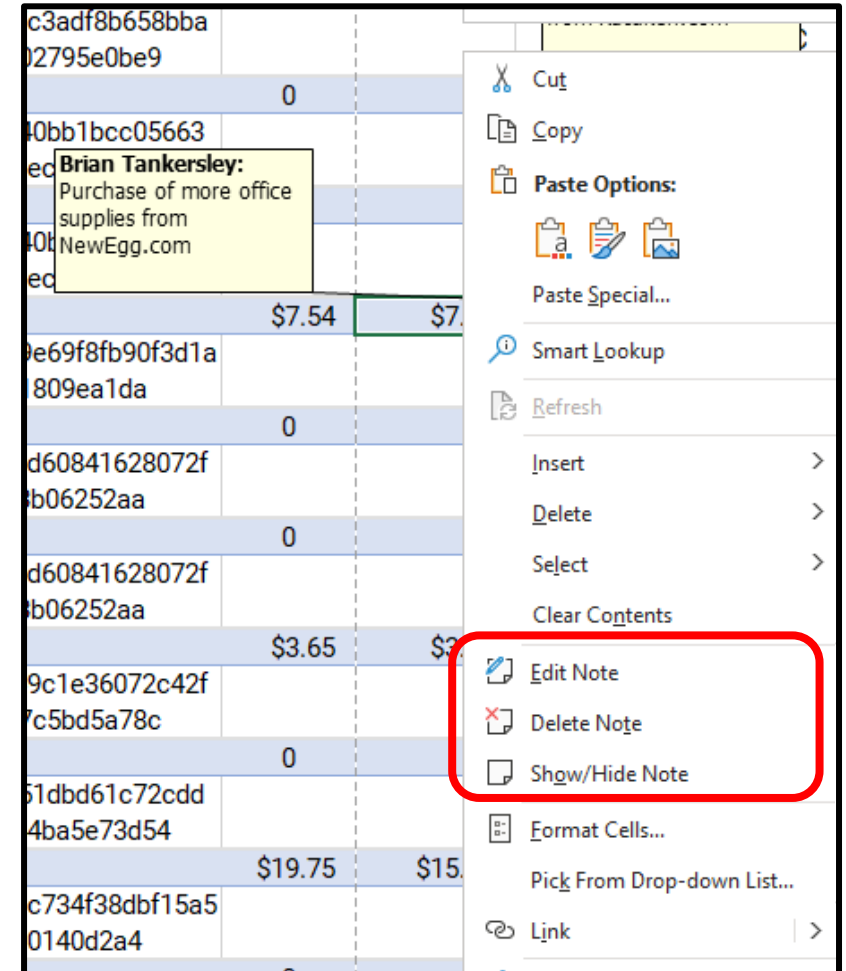
- Previous versions of Excel had an unthreaded **Comments** feature which was a single user tool for commenting on cells
- This feature was renamed **Notes** in 2018 for Office 365 subscribers, and a new threaded online collaboration tool called **Comments** was added to Excel, Word, and PowerPoint
- If you have only one feature, it's likely the old **Comments** feature (now called **Notes**); if you have both, you have the update and can use new functionality
- As shown to the right, **Notes** can be converted to new threaded **Comments** by using a menu option

The screenshot displays the 'Review' tab in the Excel ribbon. The 'Comments' group includes 'New Comment', 'Delete Comment', 'Previous Comment', 'Next Comment', and 'Show Comments'. The 'Notes' group includes 'Notes', 'Protect Sheet', and 'Protect Workbook'. A dropdown menu for 'Notes' is open, showing options: 'New Note', 'Previous Note', 'Next Note', 'Show/Hide Note', 'Show All Notes', and 'Convert to Comments'. Below the ribbon, a grid shows a cell with the value '\$1,234.00'. A yellow note box is attached to this cell, containing the text: 'Dave Ludwig: Remember to get the updated figure from Amy on the first of each month.'

The Old Comments And New Notes Feature



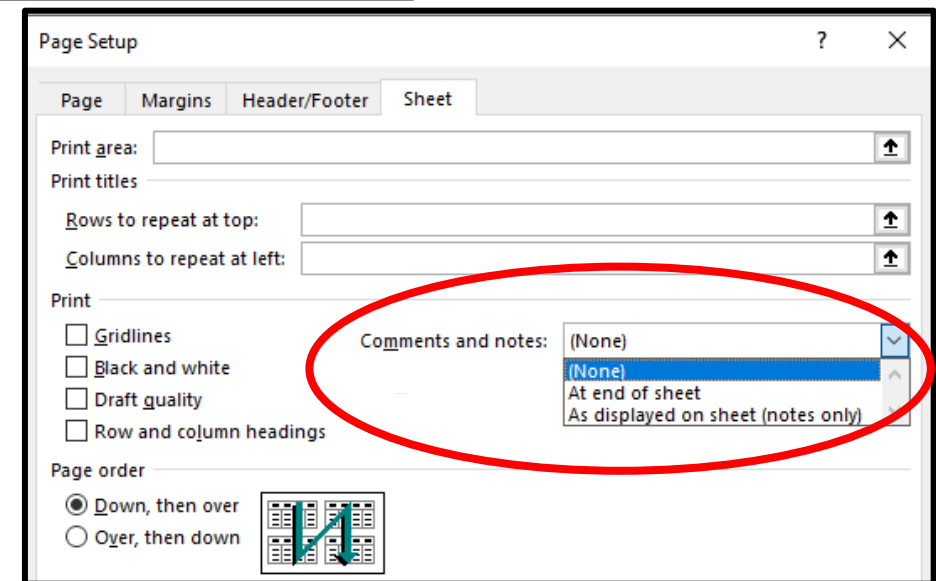
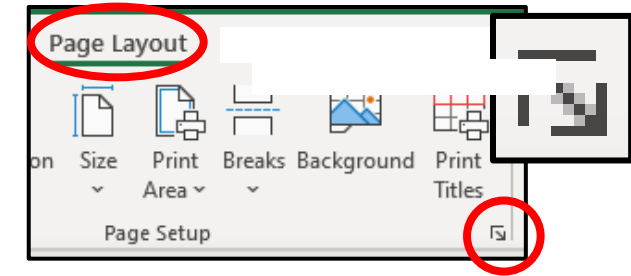
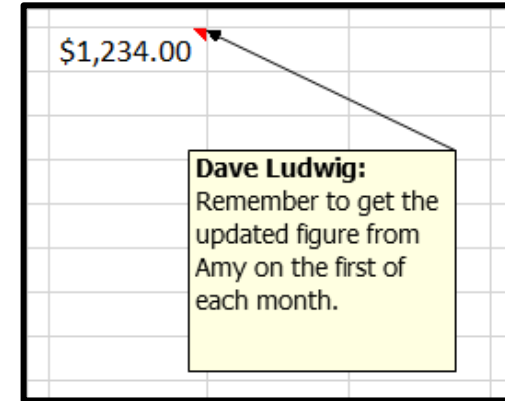
- Cells with **Notes** may have a marker in the upper right corner of the cell (as shown here)
 - Settings at **File, Options, Advanced**
- Individual comments can be activated on screen by selecting the cell and either right-clicking (shown) or clicking on **Review, Show/Hide Note**
- You can use **Review, Show/Hide All Notes** to show everything on screen



The Old Comments And New Notes Feature



- Printing notes is controlled from the **Page Setup** dialog box
 - Click on the **Page Layout** tab, then click on the dialog box launcher in the lower right corner of the **Page Setup** group to show the menu
 - Click on the **Sheet** tab, then change the options available under the **Comments and notes** drop-down menu



The New *Threaded* Comments Feature

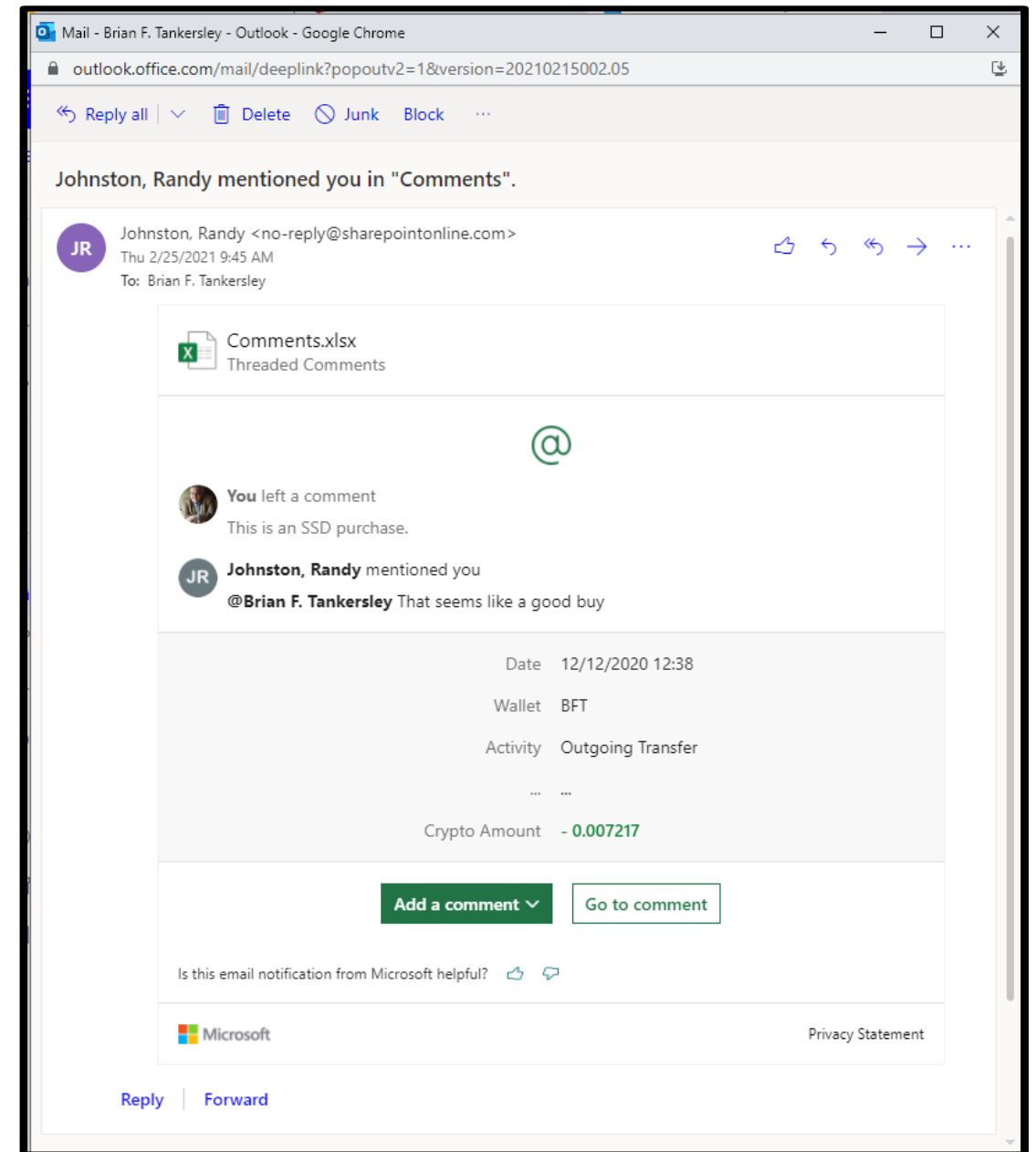


- Available in most Office 365 subs
- Allows you to comment on the cell and **@tag** someone
- When someone is tagged, Excel asks if you would like to grant that person access to the file
- Recording the comment results in the person being notified
- The other person can respond to the comment, and you will be notified of their response



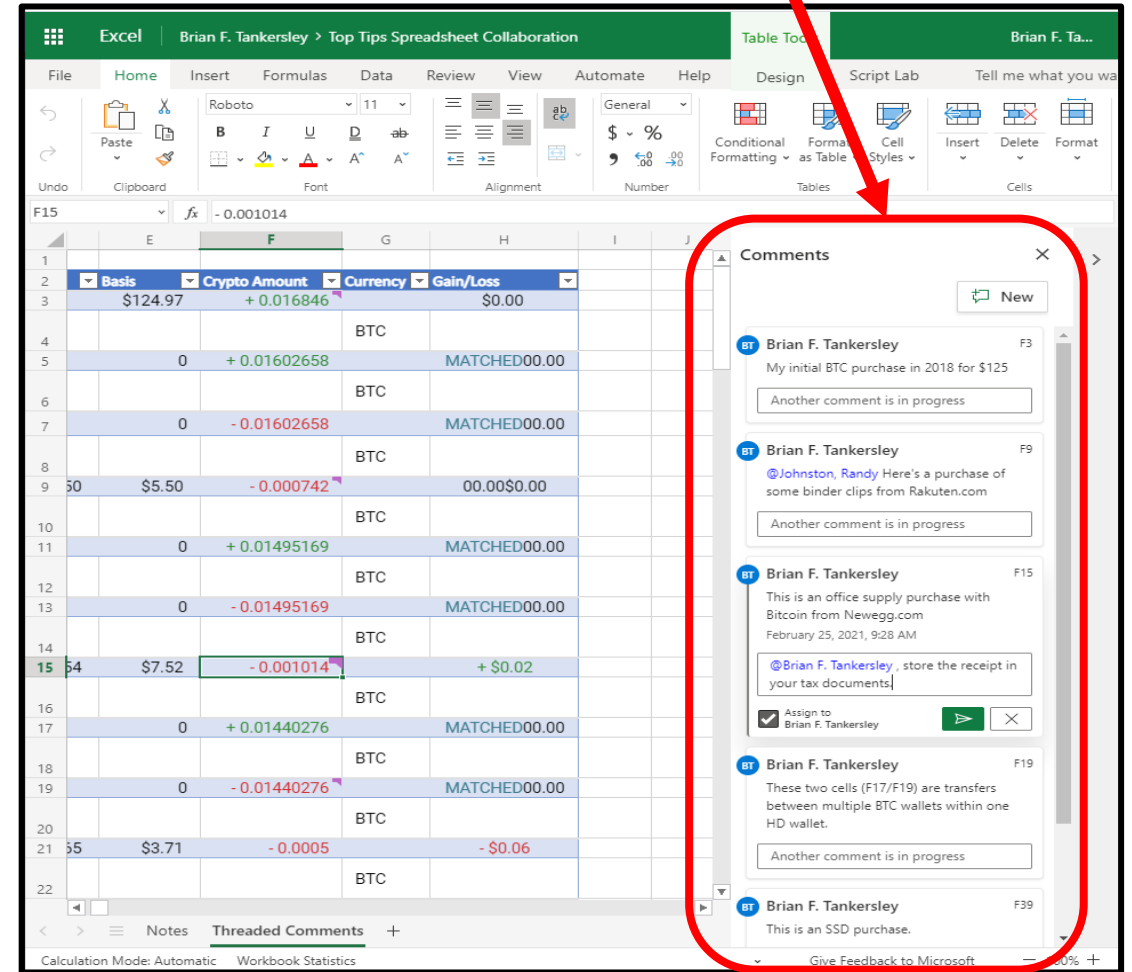
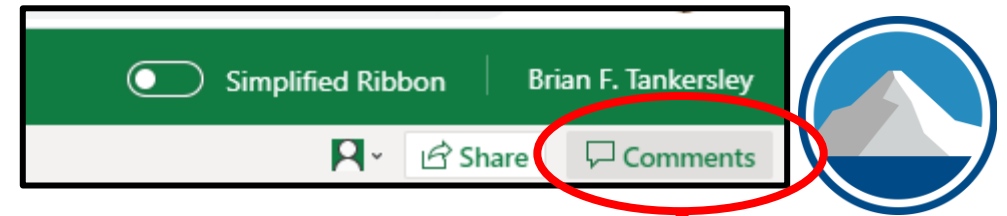
New Comments

- The file is stored in SharePoint, and the other party is notified via e-mail
- The file is editable by both of you in a web browser and you can have threaded discussions like the ones shown to the right
- Any comments made by the other party are stored in the file and you are notified via e-mail



New Comments

- Users can also be tagged in comments for a response
- The comments pane is activated by clicking on **Review, Show Comments** or by clicking on **Comments** in the upper right corner of Excel for the Web
- The tagged user will be notified via e-mail and the task is added to that person's task list
- The task can be marked as complete within the comments



Notes (Old Comments) vs. New Threaded Comments



Notes (Old Comments)

- Single user offline interface
- Data is only in the Excel file
- No alerts, @tagging, or threading on Notes
- Showing comments may obscure data on the spreadsheet
- Printing comments is similar on both platforms – with more options with Notes than with New Comments
- No easy way to assign follow-up tasks to others
- Not available in other Office applications

New Threaded Comments (NTC)

- Multiple user online interface
- Data stored in SharePoint, Teams, or OneDrive
- Comments can be threaded and others can be tagged (@name)
- When others are tagged, they are notified and e-mailed a link to the file/comment where tagged
- Comments do not obscure other cells in sheet
- Tasks can be assigned in NTC, but may or may not flow through to Outlook/ToDo/ M365 Planner depending on some factors
- Available in Word, Excel, PowerPoint

Some Things That May Affect Threaded Comment Availability



- Location where data is stored (OneDrive for Business, Personal OneDrive, Teams, SharePoint)
 - Files stored on a local network will likely not work
 - If on O365 and trying to collaborate outside your org, security or DLP settings may prohibit sharing data outside your org – check with your admin
- Version of Office applications used
 - If the user has most versions of Office 365 or Office 2019, should be able to collaborate within the software; older versions likely will not be able to use MS Office apps
 - Users with old versions of Office should be able to collaborate in a web browser – assuming that the file is stored in an acceptable location
 - Should also be logged in as the proper user (if you have multiple accounts)

Collaborative Editing



- Permits you and others to be in a file at the same time
- Requires either Microsoft 365 or a supported newer version of Excel, **PLUS** a supported platform
- Supported platforms include:
 - Microsoft OneDrive
 - OneDrive for Business
 - SharePoint
 - Teams (uses SharePoint storage)
- Security settings may make it impossible to use this function with people inside or outside of your organization

Collaborative Editing

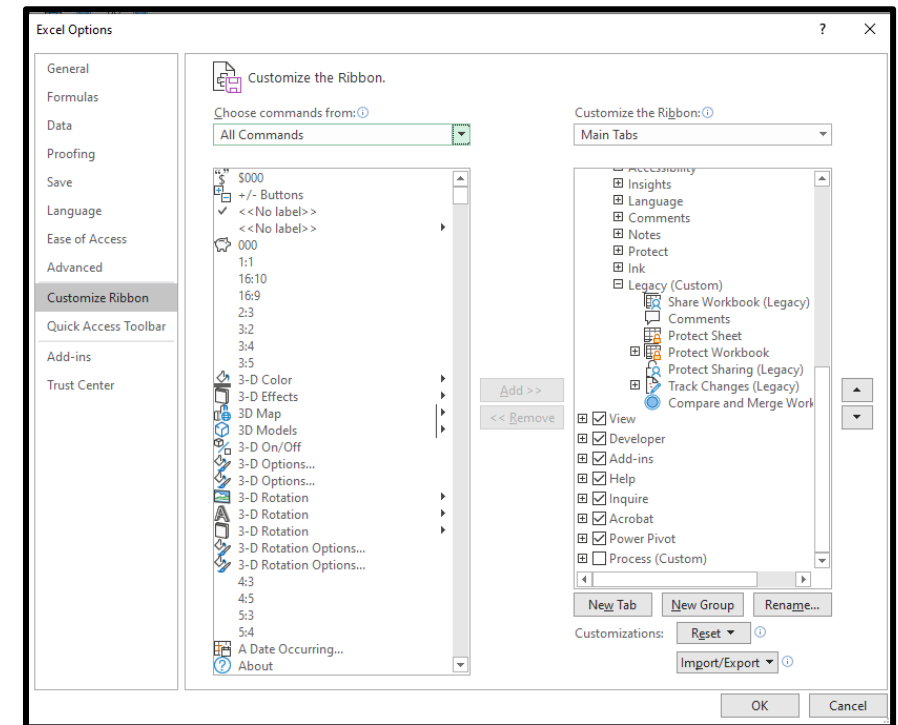
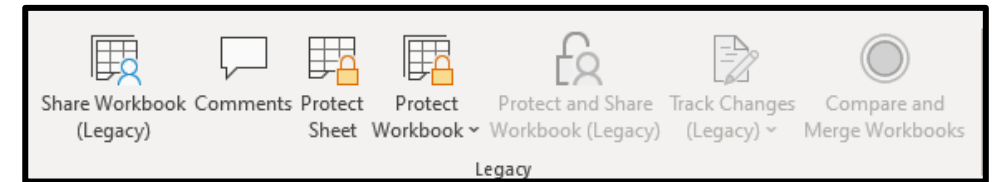


- Threaded Comments (e.g., new Comments) is used by default
- Each user is assigned a color by the cloud server, and the others discussing the item can see what cells are selected in the sheet by each user
- Can also be accomplished by sharing a screen with Excel showing the sheet for collaboration and letting the other user control the mouse/keyboard in pretty much any virtual meeting platform
- Don't forget to purge the threaded comments if permissible and if they won't be helpful after the document goes final

Working With Legacy Tools: Track Changes, Share Workbook, Share & Protect Workbook



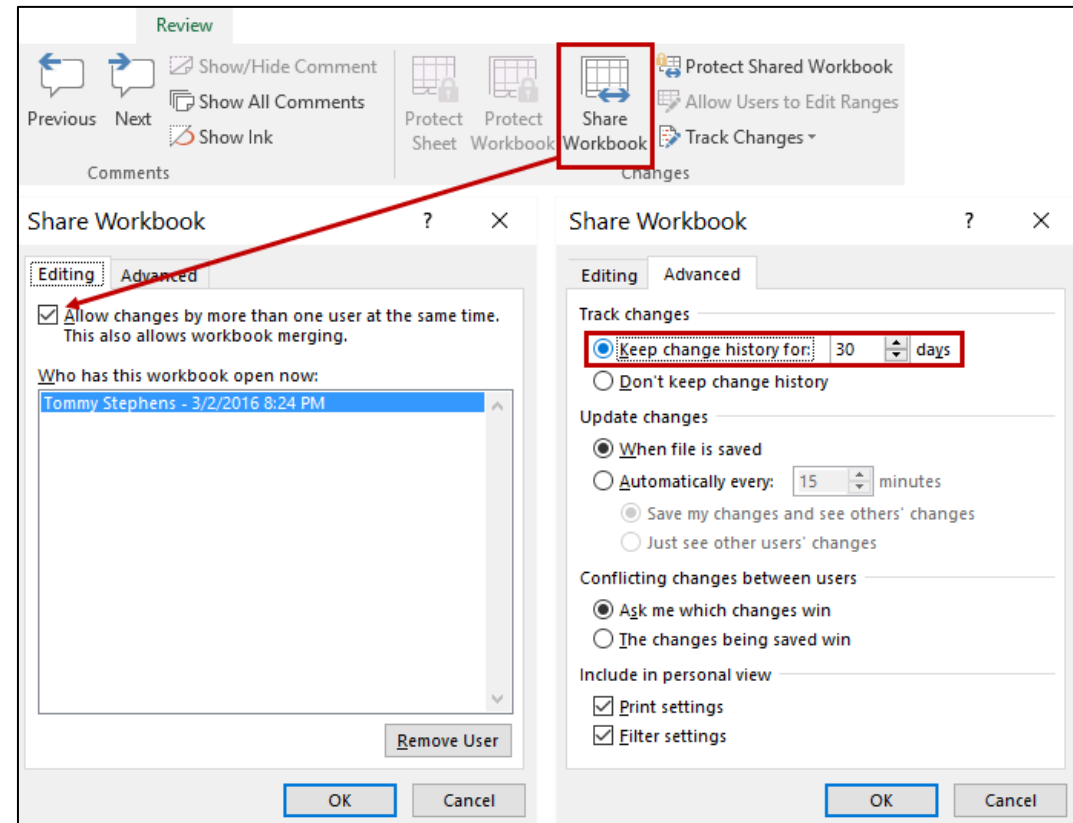
- All are “legacy” functions in Excel, so the commands must be added manually to the Ribbon/Quick Access Toolbar
- These are customized by clicking on **File, Options**, then either click on **Customize Ribbon** or **Quick Access Toolbar**
- Demonstrate



Track Changes (Legacy) & Shared Workbooks



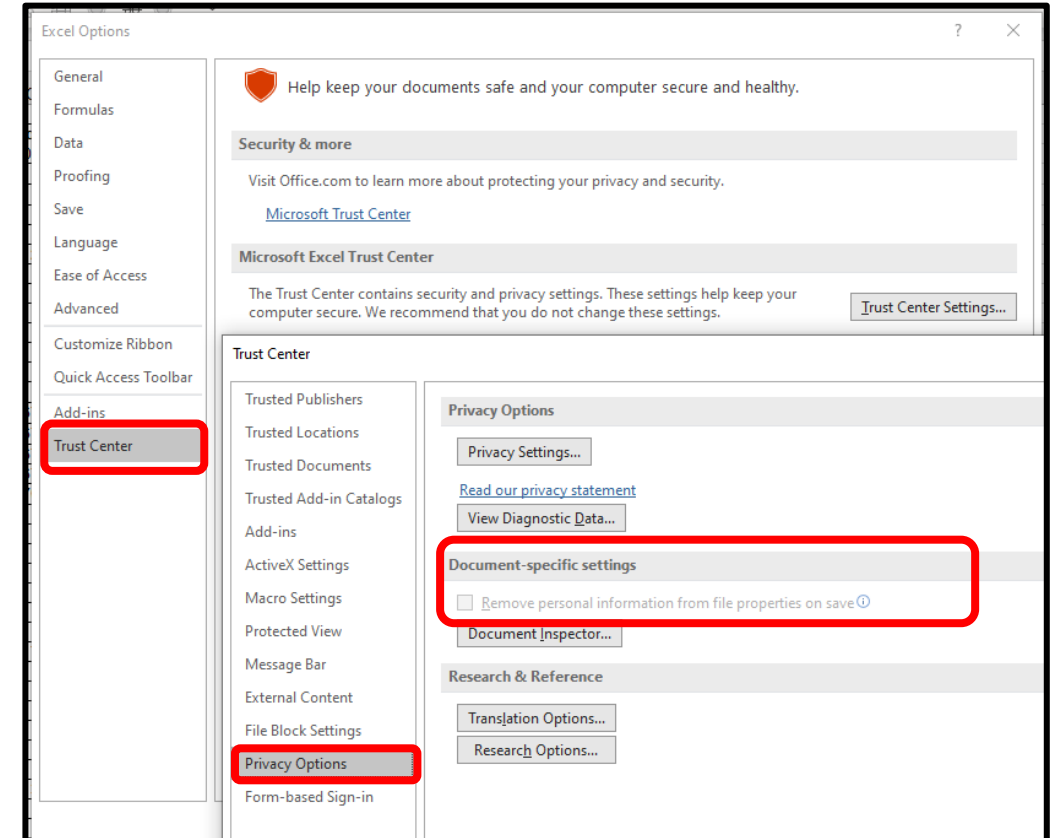
- Incompatible with some Excel features like **Tables** and **Custom Views** (grayed out when not available)
- Uses the user name in **File, Settings, General** for tracking modifications to a sheet
- Many settings (see dialog box to the right)



Track Changes (Legacy) & Shared Workbooks



- Must set **Track Changes** or **Shared Workbook** BEFORE you start making changes
- Having the Trust Center setting for “Remote personal information on save” will block running Track Changes
- Don’t miss changing the retention time for the change tracking to something longer than 30 days – like 3650 days



Track Changes (Legacy) & Shared Workbooks



- **Track Changes** is what we generally call sharing files over a local area network
- **Shared Workbook** uses the same tracking, but since you have more than one file, you must use a special tool (**Compare and Merge Workbooks**) to combine the changes from multiple files into one
- When you have changes in a cell, a marker appears in the upper left corner of the cell
- You can use the drop-down item off of the **Track Changes** icon to review tracked changes - similar to how you review spell checking

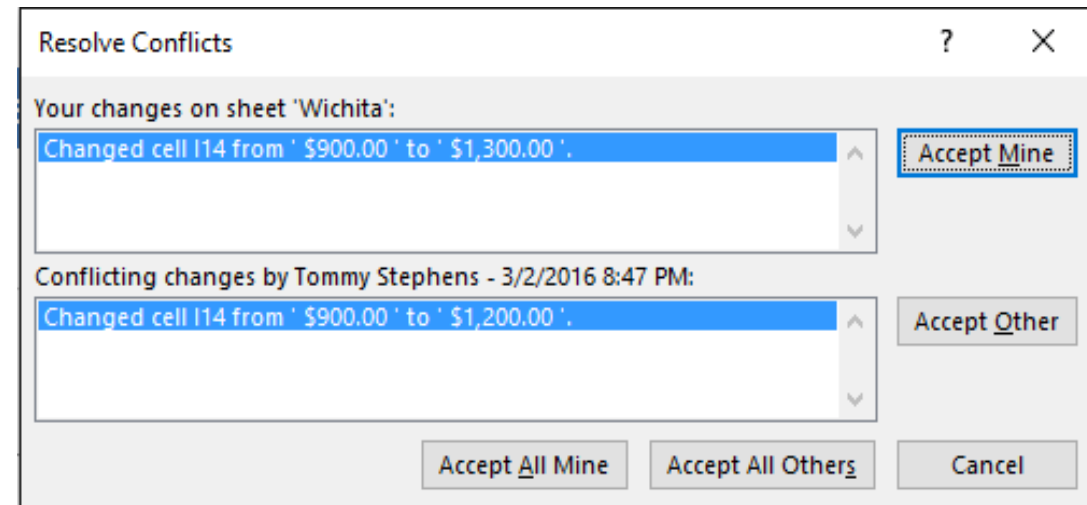
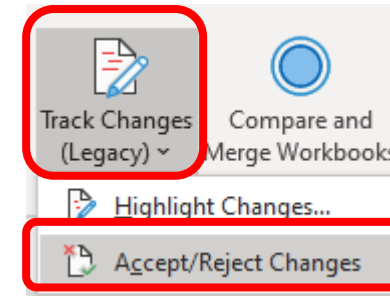


Compare and
Merge Workbooks

Resolving Conflicting Changes



- Users can track changes by selecting the **Track Changes (Legacy)** icon dropdown and then select **Accept/Reject Changes**
- This works similar to spell check, as shown to the right



Track Changes – Highlight Changes



| GTM Printing LLC | | YTD | | Q3 | | | | |
|--------------------------------|----------------------------------|-------------|--------------|-------------|--------------|-------------|-------------|-------------|
| Quarterly Budget Update | | 2017 | 2017 | | 2017 | Budget | 2016 | |
| For the year ending 12/31/2017 | | Actuals | Budget | Variance | 2016 Actuals | Budget | Actuals | |
| Wichita Office | | | | | | | | |
| 8 | 6020 Advertising | \$ 9,400.00 | \$ 10,000.00 | \$ 600.00 F | \$ 4,875.00 | \$ 5,000.00 | \$ 4,000.00 | \$ 5,250.00 |
| 9 | 6060 Bank Service Charges | 96.00 | 96.00 | | 48.00 | 48.00 | - | 48.00 |
| 10 | 6100 Car/Truck Expense | 1,783.04 | 1,750.00 | 33 | | | 600.00 | 893.73 |
| 11 | 6135 Computer Supplies/Equipment | 758.49 | - | 758 | | | 200.00 | - |
| 12 | 6140 Contributions | - | - | | | | - | - |
| 13 | 6160 Dues and Subscriptions | 23.45 | 25.00 | 1.55 F | - | 12.50 | - | - |
| 14 | 6180 Insurance | 1,864.80 | 5,000.00 | 3,135.20 F | 948.60 | 1,000.00 | 900.00 | 948.60 |

Microsoft Excel
 Your workbook has been updated with changes made by others.
 OK

Demo, 3/2/2016 8:43 PM:
 Changed cell I10 from ' \$- ' to ' \$600.00 '.

SHARED WORKBOOK FUNCTIONALITY

Users Cannot

Possible Workaround

| | |
|---|--|
| Create an Excel table | None |
| Insert or delete blocks of cells | Entire rows and columns can be inserted. |
| Delete worksheets | None |
| Merge cells or split merged cells | None |
| Add or change conditional formats | Existing formats continue to appear as cell values change. |
| Add or change data validation | Cells continue to be validated when you type new values. |
| Create or change charts or PivotCharts | Existing charts and reports can be viewed. |
| Insert or change pictures or objects | Existing pictures and objects can be viewed. |
| Insert or change hyperlinks | Existing hyperlinks continue to work. |
| Use drawing tools | Existing drawings and graphics can be viewed. |

SHARED WORKBOOK FUNCTIONALITY

Users Cannot

Possible Workaround

Assign, change, or remove passwords

Existing passwords remain in effect.

Protect or unprotect worksheets or the workbook

Existing protection remains in effect.

Create, change, or view scenarios

None

Group or outline data

Existing outlines can be used.

Insert automatic subtotals

Existing subtotals can be viewed.

Create [data tables](#)

Existing data tables can be viewed.

Create or change PivotTable reports

Existing reports can be viewed.

Write, record, change, view, or assign macros

Existing macros that do not access unavailable features can be run, and macros can be recorded and stored in another workbook.

Change or delete array formulas

Existing array formulas continue to calculate correctly.

Use a data form to add new data

An existing data form can be used to find a record.

Work with XML data

None

Custom Views



- A legacy of old versions of Excel, **Custom Views** allows you to have multiple print settings which are associated with a worksheet, including:
 - Different print ranges
 - Hidden/displayed columns/rows of data
- **Custom Views** are incompatible with **Tables**, and will be unavailable in any workbooks with either a table or a data model
- This is very useful for budgets or other analyses where you need to filter reports in different ways and create reports with different levels of detail
- This is accessed from **View, Custom Views** on the default ribbons

Scenario Manager



- A legacy of old versions of Excel, **Scenario Manager** allows you to have multiple values for assumptions which are associated with cells in a workbook
- **Custom Views** are incompatible with **Tables**, and will be unavailable in any workbooks with either a table or a data model
- This is very useful for budgets or other analyses where you need to consider a range of values for your assumptions
- **ONLY** the cells selected to change with each scenario will be modified when a scenario change occurs, so plan carefully before you set up your scenarios – adding an additional cell to be changed out will require you to remove and reestablish the scenarios
- This is accessed from **Data, What-If, Scenario Manager** on the default ribbons



OneDrive, OneDrive for Business, SharePoint, and Teams,
**WHAT YOU NEED TO KNOW ABOUT
MICROSOFT'S CLOUD STORAGE TOOLS**

OneDrive (Personal)



- Allows for storage and simultaneous editing of documents, local synchronization of files, and cloud access to documents
- Simultaneous editing will require a MS 365 subscription for each user
- Shouldn't be used for any confidential data
- Includes versioning (for only changes in last 30 days)
- The first 5 GB of storage is free; a 100 GB standalone sub is \$1.99/mo
- 1 TB/user is included with Microsoft 365 Family/Personal
- Only included with personal Office 365 plans – the business version of OneDrive is different

OneDrive For Business



- Allows for storage and simultaneous editing of documents, local synchronization of files, and cloud access to documents
- Simultaneous editing will require a MS 365 subscription for each user
- Will do compliance with most regulatory regimes (HIPAA/HITECH, FERPA, GLB, GDPR, and many others), but should check that settings are correct before using it for protected data – data is actually stored in SharePoint
- Most business subscriptions include 1 TB/user of storage
- Includes more sophisticated versioning (major/minor) as well as check in/check out
- Included with Microsoft 365 plans for business/enterprises

Teams



- Allows for storage and simultaneous editing of documents, local synchronization of files, and cloud access to documents from within **Teams** and **Channels** in a **Files** tab
- Simultaneous editing will require a MS 365 subscription for each user
- Will do compliance with most regulatory regimes (HIPAA/HITECH, FERPA, GLB, GDPR, and many others), but should check that settings are correct before using it for protected data – data is actually stored in SharePoint
- Storage can be unlinked from a Team if the name of the Team is changed
- Includes more sophisticated versioning (major/minor) as well as check in/check out
- Included with Microsoft 365 plans for business/enterprises

SharePoint



- Is the back end for data stored in Teams and OneDrive for Business
- Designed for Enterprises to use when creating internal websites
- Workflow was part of this tool in previous versions, but current versions move workflow management to the Microsoft Power Platform (Power Automate, Power Apps, and Power BI)
- Will do compliance with most regulatory regimes (HIPAA/HITECH, FERPA, GLB, GDPR, and many others), but should check that settings are correct before using it for protected data – data is actually stored in SharePoint
- Includes more sophisticated versioning (major/minor) as well as check in/check out



Versioning, Check-out, and Inquire

TRACKING AND COMPARING VERSIONS OF A SPREADSHEET

Versioning/Version Control



- Saves all old versions of a file without having to change the name
- Built into OneDrive, OD4B, SharePoint, Box, and many others
- Consumer apps usually have more simple versioning (no numbering)
- Most enterprise applications have version numbering
 - Whole numbers (1.0, 2.0, etc.) represent “major” revisions
 - Incremental decimals (1.1, 1.2, 1.3, etc.) represent “minor” revisions
 - Your application will likely keep dozens of revisions if you edit it while it is stored in OD4B or SharePoint – this PowerPoint file saves a major revision about every 30 minutes
 - This structure allows users to delete certain major/minor revisions and preserve only the key milestone versions of a project document
- Archival and retention policies can be set at the corporate level

Check-In/Check Out



- Allows users to alert others that they are editing files offline and mark the files on a portal/website as “read only”
 - This gives you “exclusive editing” rights until you check the document in again
 - The check out can also be cancelled by you or an admin if you make no changes
- Usually only present in higher-end DMS/CMS/file storage tools, and since this is a team collaboration tool, it’s uncommon in personal storage (OneDrive, OD4B, Drobox, etc.)
- Many enterprises have the “check-in” trigger a document approval workflow or a notification in SharePoint, Teams, or other DMS applications
 - These features must usually be configured, but may be built into the application like Microsoft Teams, Microsoft SharePoint, or may require an external application like Microsoft Power Automate

Inquire



- An add-in for Excel included only with Enterprise Microsoft 365, Office Pro Plus, and some business versions of Microsoft 365
- A very powerful tool for spreadsheet auditing and comparing documents
- Automatically creates detailed lists of cell values and formulas
- Identifies and documents risky items in workbooks, including:
 - Connections to outside data sources
 - Cell values linked from other spreadsheets
 - Hidden sheets, columns, and rows
 - Inconsistent formulas
 - Cells with comments
 - Cells and ranges with errors
 - Warning messages

Inquire



- Inquire will also compare two workbooks to one another, and will identify differences on a cell-by-cell basis in major areas like
 - Entered and calculated values
 - Formulas and errors in formulas
 - Structural differences in files
 - Macros
 - External data connections
 - Cell formatting
 - Cell/sheet/workbook protection

Home

Compare Files, Show Details, Show Formulas, View, Export Results, Copy Results to Clipboard, Export, Options, Help, Information

| | A | B | C | D | E | F | G | H |
|----|-----------------|--------|--|--------|----------|---------------|----------|--------------|
| 1 | | | | | | | | |
| 2 | Date | Wallet | Activity | MktVal | Basis | Crypto Amount | Currency | Gain/Loss |
| 3 | 7/18/2018 11:42 | BFT | Incoming Transfer | 0 | \$124.97 | + 0.016846 | | \$0.00 |
| 4 | | | 646de125639ea667e9d3475e552d091c020e3770c33f9a1ad1b07bbdcae8062a | | | | BTC | |
| 5 | 7/18/2018 12:00 | BFT | Incoming Transfer | 0 | 0 | + 0.01602658 | | MATCHED00.00 |
| 6 | | | c0b707b59a7b8cfc0116461323faa61c604963d6e02cc0e98a1035225e850bab | | | | BTC | |
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| 9 | 7/18/2018 12:00 | BFT | Outgoing Transfer | \$5.50 | \$5.50 | - 0.000742 | | 00.00\$0.00 |
| 10 | | | 99cbf6c3d61d1802d8467c3adf8b658bba40b316b99d67e3addb2902795e0be9 | | | | BTC | |
| 11 | 7/18/2018 12:39 | BFT | Incoming Transfer | 0 | 0 | + 0.01495169 | | MATCHED00.00 |
| 12 | | | d97383bae2181383c73540bb1bcc056634c1d5089047adcdcf17eeec903bed3d | | | | BTC | |
| 13 | 7/18/2018 12:39 | BFT | Outgoing Transfer | 0 | 0 | - 0.01495169 | | MATCHED00.00 |
| 14 | | | d97383bae2181383c73540bb1bcc056634c1d5089047adcdcf17eeec903bed3d | | | | BTC | |
| 15 | 7/18/2018 12:39 | BFT | Outgoing Transfer | \$7.54 | \$7.52 | - 0.001014 | | + \$0.02 |
| 16 | | | b25602a186774cd307359e69f8fb90f3d1aa39ccdc92b50cc47b0c1809ea1da | | | | BTC | |
| 17 | 7/18/2018 16:38 | BFT | Incoming Transfer | 0 | 0 | + 0.01440276 | | MATCHED00.00 |
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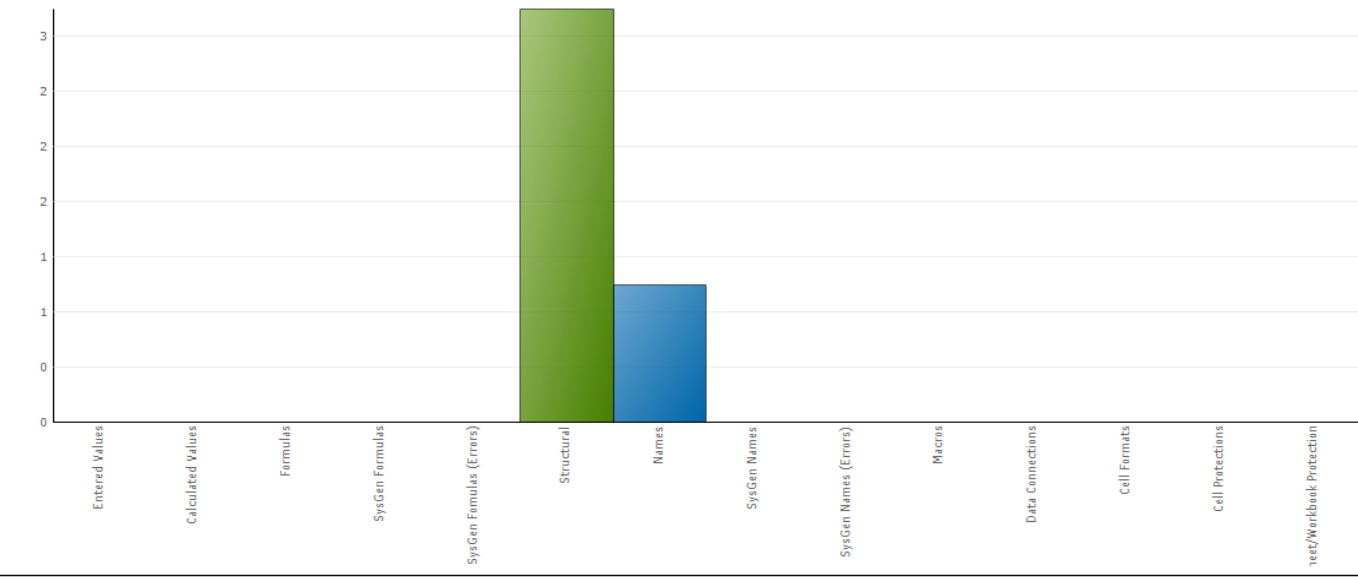
| | A | B | C | D | E | F | G | H |
|----|------------------|-----|--|---------|---------|--------------|-----|--------------|
| 20 | | | a12d0bdf8ca536e60e081d60841628072f9328f6bb95525217f9603b06252aa | | | | BTC | |
| 21 | 7/18/2018 16:38 | BFT | Outgoing Transfer | \$3.65 | \$3.71 | - 0.0005 | | -\$0.06 |
| 22 | | | d828884caf8db0aa3db659c1e36072c42f26b68a1e26bd6ab329e37c5bd5a78c | | | | BTC | |
| 23 | 6/17/2019 19:41 | BFT | Incoming Transfer | 0 | 0 | + 0.01204562 | | MATCHED00.00 |
| 24 | | | d40a6525ca81d18715cc51dbd61c72cdd0842a80486f09d1472dc44ba5e73d54 | | | | BTC | |
| 25 | 6/17/2019 19:41 | BFT | Outgoing Transfer | \$19.75 | \$15.67 | - 0.002112 | | + \$4.08 |
| 26 | | | 268528208cfa4b3e67bdcc734f38dbf15a5bd133a21b61142d622f010140d2a4 | | | | BTC | |
| 27 | 6/17/2019 19:41 | BFT | Outgoing Transfer | 0 | 0 | - 0.01204562 | | MATCHED00.00 |
| 28 | | | d40a6525ca81d18715cc51dbd61c72cdd0842a80486f09d1472dc44ba5e73d54 | | | | BTC | |
| 29 | 12/12/2020 11:31 | BFT | Incoming Transfer | 0 | 0 | + 0.01171063 | | MATCHED00.00 |
| 30 | | | a8814e2ae7552f3f4d5c8a8c6b277e8d80189e0d657914fae6bbfa3782113c3a | | | | BTC | |
| 31 | 12/12/2020 11:31 | BFT | Outgoing Transfer | 0 | 0 | - 0.01171063 | | MATCHED00.00 |
| 32 | | | a8814e2ae7552f3f4d5c8a8c6b277e8d80189e0d657914fae6bbfa3782113c3a | | | | BTC | |
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| 35 | 12/12/2020 12:38 | BFT | Incoming Transfer | 0 | 0 | + 0.00435539 | | MATCHED00.00 |
| 36 | | | d49841503cf212399d07b3d2e777c21b1c1a4a679c31d4916b7de1941f3c912f | | | | BTC | |
| 37 | 12/12/2020 12:38 | BFT | Outgoing Transfer | 0 | 0 | - 0.00435539 | | MATCHED00.00 |

Notes, Threaded Comments, Binder Clips

Notes, Threaded Comments

- Select All
- Entered Values
- Calculated Values
- Formulas
- SysGen Formulas
- SysGen Formulas Errors
- Structural
- Names
- SysGen Names
- SysGen Names Error
- Macros
- Data Connection
- Cell Format
- Cell Protection
- Sheet/Workbook Protection

| Sheet | Cell | Value 1 | Value 2 | Change Description |
|-------------------|------------|-----------------|---------|--------------------------------|
| Binder Clips | | | | Deleted Sheet From Position 3. |
| Threaded Comments | | | | Deleted Column O. |
| Threaded Comments | | | | Added Column H. |
| Threaded Comments | _xlsm.P... | =Threaded Co... | | Named Item Deleted. |





Questions: brian@k2e.com

THANKS FOR ATTENDING