

User Aids for ANU Monthly Status Reporting

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Outline

- ANU Monthly Status Workflow (2 slides)
 - Employs MS Excel worksheets
- User Aids (4 slides)
 - Comments on UDFs and VBA in MS Excel
 - Two UDFs are used on status worksheets
 - Slide 6 has a link to Excel worksheet with examples of user aids in action
- MS Excel Security Issues (1 slide)
 - Discusses VBA as a security issue
- Summary (1 slide)

Status Workflow

- Activity Information is extracted from Open Plan ~3 working days before the end of the month and is pasted into MS Excel Worksheets for RR, MI, NuMI and Beam Physics.
- CAMs/+ update status for newly started activities, activities in progress, completed activities (~5 working days after beginning of month)
- Forecast/Actual Start Date, Forecast/Actual Finish Date, % Completion columns get entries. A column for Comments is used also. There is a column for Remaining Duration.
- Status information is checked and transferred to ANU turnaround report (extracted from docid [1919](#))

Status Workflow (con't)

- Harry Ferguson/Bill Freeman inspect and transfer status to standardized turnaround report
- Bill Freeman enters status information into Open Plan (OP)
- Suzanne Saxer processes OP output through Cobra
- Suzanne generates reports used for monthly PMG meeting/variance processing

User Aids

- Columns “Remaining Duration” and “Date Check” have “User Defined Functions” (UDFs)
 - Written in VBA (Visual Basic for Applications)
 - [VBA must be enabled](#) for the UDFs to work
- A UDF in a cell can change the value of that cell—but no other
 - However, it can change cell comments in other cells

User Aids (con't)

- The “Remaining Duration” UDF looks at Activity Type (ASAP, Subproject, etc.), Progress Type (Planned, Remaining Duration, etc.), Original Duration, Progress Value, % (from OP), Fcst/Act St, Fcst/Act Fin, %, Comment.
 - It calculates a value for Remaining Duration and makes cell comments in neighboring cells if it senses conflicts/inconsistencies/missing data
 - The indicator for cell comments should be enabled

User Aids (con't)

- The “Date Check” UDF looks at Activity Type (ASAP, Subproject, etc.), Progress Type (Planned, Remaining Duration, etc.), Progress Value, Early Finish Date (OP).
 - It subtracts (Remaining Duration * 7/5 + holiday adjustment) from Early Finish Date
 - The result should be a date close to the status date of the previous month, unless a predecessor activity is pushing the date later

User Aids (con't)

- Go to MS Excel [example](#) to see User Aids in action
 - Various examples of generating cell comments are shown
 - To see cell comments:
 - choose Excel display option to show cell comment indicators, click on cell, or
 - choose Excel display option to show cell comments (likely to be messy)

MS Excel security issues

- VBA is executable code and can be a security concern
- Excel 97-2003 is more lenient than is Excel 2007
 - Excel 2007 files with xlsx extension cannot contain VBA code
 - Excel 2007 files with xlsb and xlsm extensions can contain VBA code
- HTTP servers at Fermilab have some problems with files with xlsx, xlsb and xlsm extensions
 - A Service Desk request has been submitted

Summary

- This presentation discussed ANU monthly status workflow (using MS Excel worksheets)
- User Defined Functions (UDFs) are used to aid in making proper status entries each month
- UDFs are written in VBA and make cell comments. Enabling VBA, and cell comment indicators, are both necessary--in order to benefit from the UDF user aids