

OT Data Automation using Excel VBA

Introduction

While transitioning between campaigns, I was temporarily assigned to a high-demand process with significant overtime (OT) activity. Every month, one of the team leaders was responsible for consolidating OT data of all agents and submitting it in a specific format to the payroll team. This was a repetitive, manual task consuming a considerable amount of time.

Business requirements

The payroll team required the OT data to be formatted as follows:

- The base OT hours were provided in decimal format and needed to be converted to **HH:MM** time format.
- No individual OT entry could exceed **4 hours per day**.
- Entries were to be broken down in **multiples of 4 hours**, with the final entry containing the remaining time.
- OT entries were restricted to **working days only (Monday to Friday)**.
- The processed file needed to include **agent details**, their **team alignment**, and associated **process name**.

The Challenge

On average:

- Each agent logged about **25–30 hours** of OT monthly.
- There were approximately **65 agents**, resulting in nearly **450–500 OT entries** to be generated.
- The manual preparation of the file took up to **2 hours** each month, consuming **25% of a leader's productive day** for just one task.

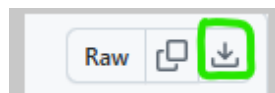
The Solution

I built an Excel VBA automation that **reduced the OT data preparation time** from **2 hours to under 5 minutes**, improving efficiency by **over 95%** while ensuring accuracy and **eliminating manual errors**.

Download Instructions

Go to https://github.com/krusmane/my_projects/tree/main/Source

Click “OT Data Automation.xlsm” file

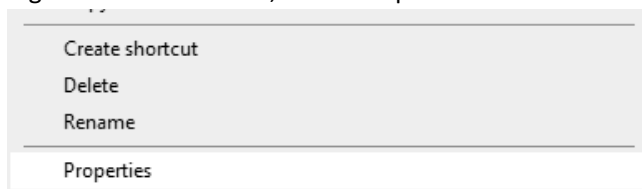


Click on “View Raw” link or Download icon

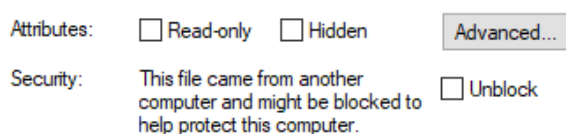
*Note: Since this is a macro-based file, by default your system will apply a security block when you download and use it for the first time. Don't worry though, you just need to **Unblock** that security block and **Enable Content***

Here are the steps:

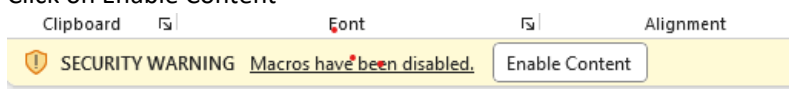
1. Right click on file name, select Properties



2. Look for Security info at the bottom, check on Unblock



3. Click on Enable Content



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Emp ID	OT hrs (Decimal)	OT hrs (HH:MM)	Lines Needed	Status						Total Raw OT hrs (decimal)	1362.36	Total Processed OT hrs (decimal)	0
11001	6									Total Raw OT hrs (HH:MM)	0:00	Total Processed OT Hrs (HH:MM)	0:00
11002	24.65												
11003	36.25												
11004	2.36												
11005	65												
11006	27												
11007	24.5												
11008	18.3												
11009	20												
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Emp ID	OT hrs (Decimal)	OT hrs (HH:MM)	Lines Needed	Status						Total Raw OT hrs (decimal)	1362.36	Total Processed OT Hrs (decimal)	0
11001	6	6:00	2	Pending						Total Raw OT hrs (HH:MM)	1362:21	Total Processed OT Hrs (HH:MM)	0:00
11002	24.65	24:39	7	Pending									
11003	36.25	36:15	10	Pending									
11004	2.36	2:21	1	Pending									
11005	65	65:00	17	Pending									
11006	27	27:00	7	Pending									
11007	24.5	24:30	7	Pending									
11008	18.3	18:18	5	Pending									
11009	20	20:00	5	Pending									
11010	25.3	25:18	7	Pending									
11011	31	31:00	8	Pending									
11012	38	38:00	10	Pending									
11013	28	28:00	7	Pending									
11014	19	19:00	5	Pending									
11015	30	30:00	8	Pending									
11016	22	22:00	6	Pending									
11017	38	38:00	10	Pending									
11018	11	11:00	3	Pending									
11019	29	29:00	8	Pending									
11020	41	41:00	11	Pending									
11021	17	17:00	5	Pending									

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=VLOOKUP(B2,Ref1A:D,4,0)

Date	Emp ID	OT hrs (decimal)	OT hrs (HH:MM)	Agent	Supervisor	Process										
5/1/2025	11001	4	4:00	Aditi Shah	Ravi Mehta	Billing Support										
5/2/2025	11001	2	2:00	Aditi Shah	Ravi Mehta	Billing Support										
5/1/2025	11002	4	4:00	Arjun Patel	Ravi Mehta	Billing Support										
5/2/2025	11002	4	4:00	Arjun Patel	Ravi Mehta	Billing Support										
5/5/2025	11002	4	4:00	Arjun Patel	Ravi Mehta	Billing Support										
5/6/2025	11002	4	4:00	Arjun Patel	Ravi Mehta	Billing Support										
5/7/2025	11002	4	4:00	Arjun Patel	Ravi Mehta	Billing Support										
5/8/2025	11002	4	4:00	Arjun Patel	Ravi Mehta	Billing Support										
5/9/2025	11002	0.65	0:39	Arjun Patel	Ravi Mehta	Billing Support										
5/1/2025	11003	4	4:00	Bhavna Joshi	Ravi Mehta	Billing Support										
5/2/2025	11003	4	4:00	Bhavna Joshi	Ravi Mehta	Billing Support										
5/5/2025	11003	4	4:00	Bhavna Joshi	Ravi Mehta	Billing Support										
5/6/2025	11003	4	4:00	Bhavna Joshi	Ravi Mehta	Billing Support										
5/7/2025	11003	4	4:00	Bhavna Joshi	Ravi Mehta	Billing Support										
5/8/2025	11003	4	4:00	Bhavna Joshi	Ravi Mehta	Billing Support										
5/9/2025	11003	4	4:00	Bhavna Joshi	Ravi Mehta	Billing Support										
5/12/2025	11003	4	4:00	Bhavna Joshi	Ravi Mehta	Billing Support										
5/13/2025	11003	4	4:00	Bhavna Joshi	Ravi Mehta	Billing Support										
5/14/2025	11003	0.25	0:15	Bhavna Joshi	Ravi Mehta	Billing Support										
5/1/2025	11004	2.36	2:21	Chetan Kumar	Ravi Mehta	Billing Support										
5/1/2025	11005	4	4:00	Disha Rao	Ravi Mehta	Billing Support										

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