

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:

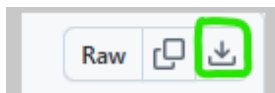
- Each agent logged about **25–30 hours** of OT monthly.
- There were approximately **65 agents**, resulting in nearly **450–500 OT entries** to be generated.
- The manual preparation of the file took up to **2 hours** each month, consuming **25% of a leader's productive day** for just one task.

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

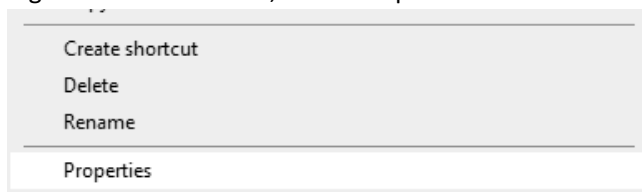
Go to [Source](#) folder, click on “OT Data Automation.xlsm” file, click on download icon on right of the page.



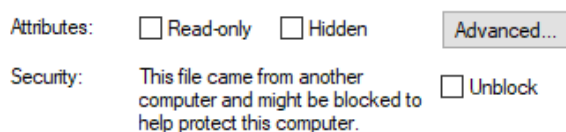
*Note: Since this is a macro-based file, by default your system will apply a security block when you download and use it for the first time. Don't worry though, you just need to **Unblock** that security block and **Enable Content***

Here are the steps:

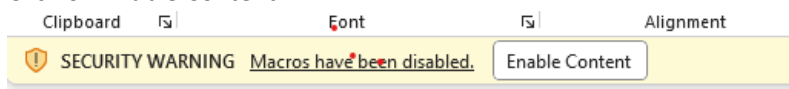
1. Right click on file name, select Properties



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



3. Click on Enable Content



Screenshots

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K5

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							0:00
11002	24.65				Prepare			
11003	36.25				Process			
11004	2.36				Clear			
11005	65							
11006	27							
11007	24.5							
11008	18.3							
11009	20							
11010	25.3							
11011	31							
11012	38							
11013	28							
11014	19							
11015	30							
11016	22							
11017	38							
11018	11							
11019	29							
11020	41							
11021	17							

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=IF(L27="Fri", (K27+ 3), (K27+ 1))

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				0:00
11002	24.65	24:39	7	Pending	Prepare			
11003	36.25	36:15	10	Pending	Process			
11004	2.36	2:21	1	Pending	Clear			
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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