How to make real-time events in RPG Maker VX Ace

This guide will walk through how to create a full real-time event system in RPG Maker VX Ace. It is expected that you already know what RPG Maker VX Ace is and have some experience using its basic systems.

A “Real-Time” system is one that tracks information and makes changes based on the active passage of time. This can involve, but is not limited to, creating a system which reflects time on a one-to-one scale with reality. Real-Time tracking can be useful for creating games with stronger narrative focus or for challenging but broad time-based mechanics.

Warning:

Do not download RPG Maker VX Ace from an unlicensed retailer. The only legal English version is through Steam. Downloading a “free” version may result in harmful malware.

Materials:

A computer with RPG Maker VX Ace installed; an English version is available on Steam- https://store.steampowered.com/app/220700/RPG_Maker_VX_Ace/

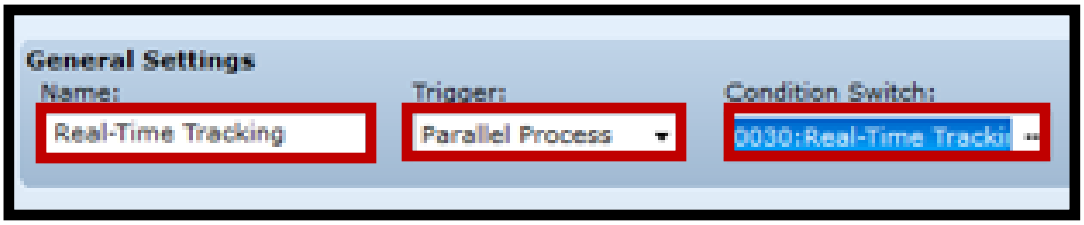
Section 1: Create your real-time tracking event

You will first need to create the base event which will control the real-time tracking. Without this event, the real-time tracking would have to be contained on each individual map, increasing the game’s memory usage.

1. **Click** on the **Database** icon on the **Tool Bar** or **press F9.**

2. **Click** on the **Common Events** tab.

3. **Click** on a new entry and **name** it **“Real-Time Tracking”** and set its **Trigger** to **Parallel Process**.



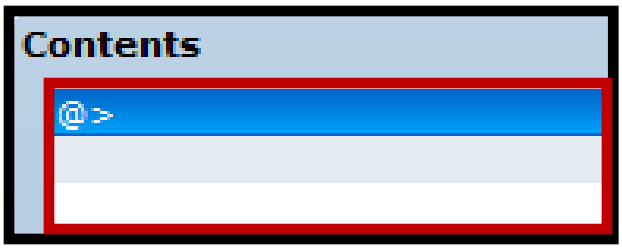
4. Set the **Condition Switch** to a new entry and **name** it **“Real-Time Tracking”** as well.

5. **Click OK** to **save** the switch entry.

Section 2: Set-up your pre-processors

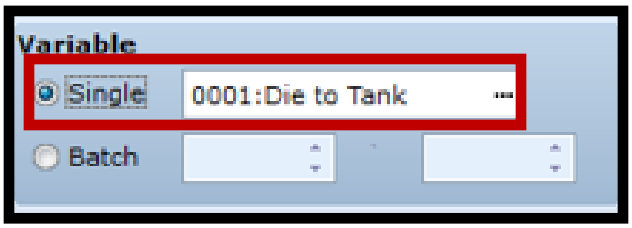
You must **define** the **Switches** and **Variables** that you will be using. These switches and variables will control the fundamental decision making which the real-time system will rely upon to operate. The variables will be used to track the passage of time, while the switches are used to control actions which respond to the passage of time.

1. **Double-click** inside of the **Event Contents** to **open** the **Event Commands** window.



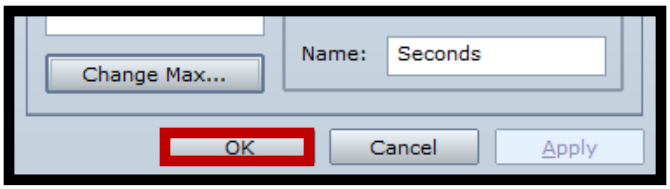
2. **Click** the **Control Variables…** button.

3. **Click** on the field next to the **Single** bullet-point.

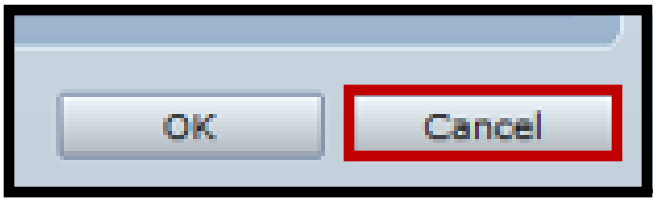


4. **Click** on an entry on the right side of the page to **select** it. **Rename** it using the "**Name:"** field at the bottom right. Add **2 new entries**, one for **seconds** and one for **minutes**.

5. **Click** the **OK** button.

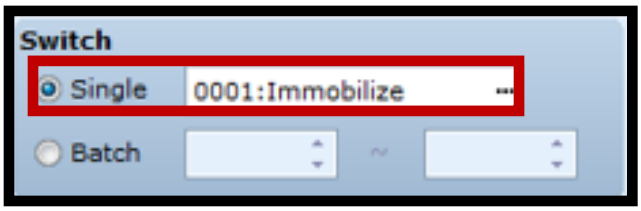


6. **Click Cancel** at the bottom right.



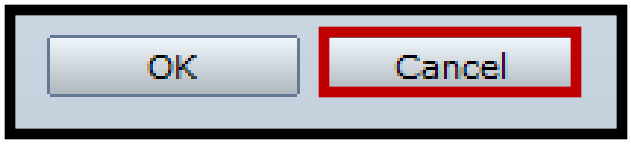
7. **Click** the **Control Switches⋯** button.

8. **Click** on the field beside the **Single.**



9. **Add 2** new entries named “(Character) MR # Start/End” the **click OK.**

10. **Click Cancel.**

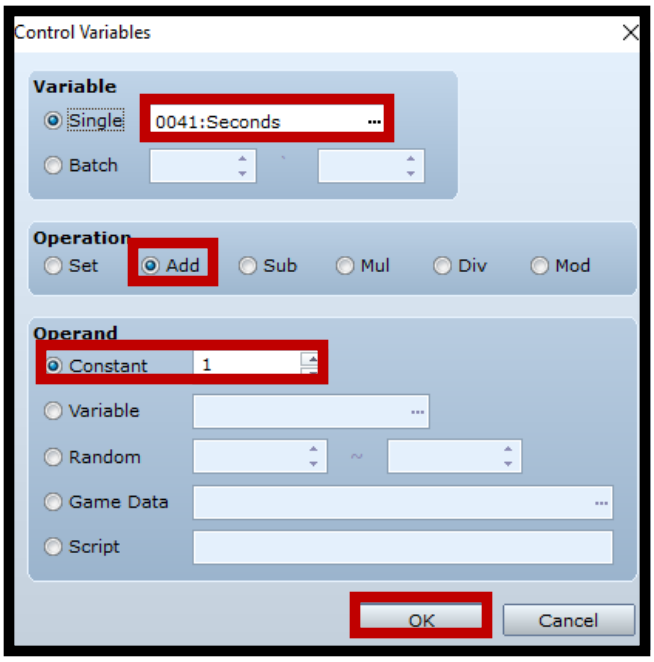


Section 3: Create your real-time tracking to your preferred degree

Create your real-time tracking to your preferred degree of precision. You can expand this to include hours, days, months, or even years, however each degree needs a variable to store it and the proper decision making to make it effective.

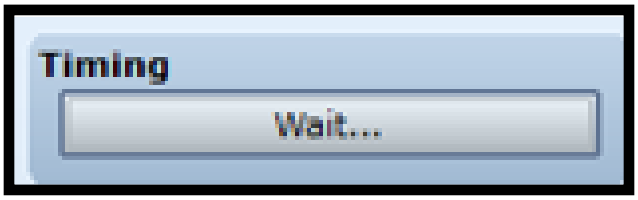
1. **Click Control Variables….**

2. **Click Add**. **Set** the **Constant 1** and set the variable to **Seconds**. **Click OK.**

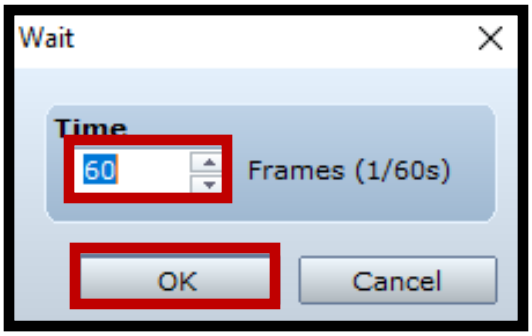


3. **Double-click** in the **Event Contents. Click** "**2**" at the top.

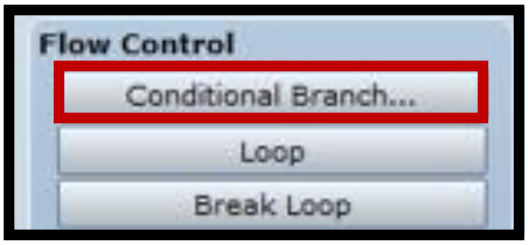
4. **Click Wait⋯.**



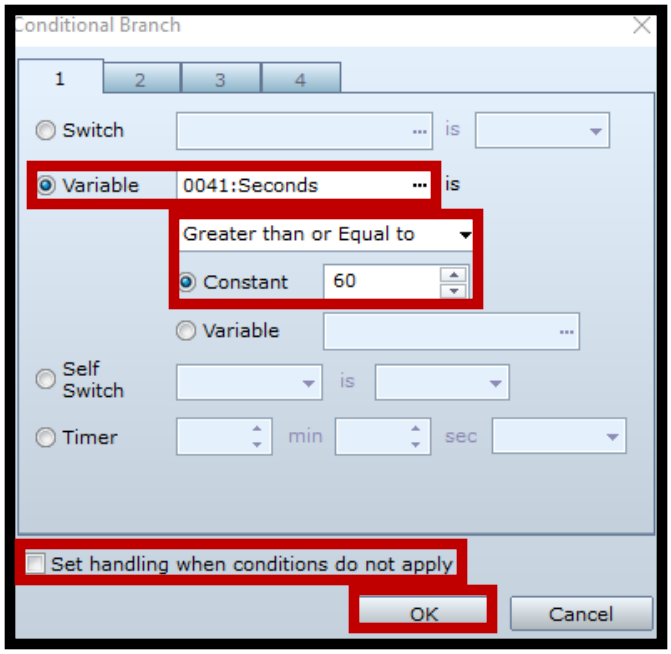
5. **Set** to **60 frames**. **Click OK.**



6. **Double-click** in the **Event Contents** and **select Conditional Branch…**.



7. **Ensure Set handling when conditions do not apply** is **unchecked**. **Set** to **Variable**, **set** the variable to **Seconds**, set the drop-down menu to **Greater than or Equal to**, and set the **constant** to **60**. **Click OK.**

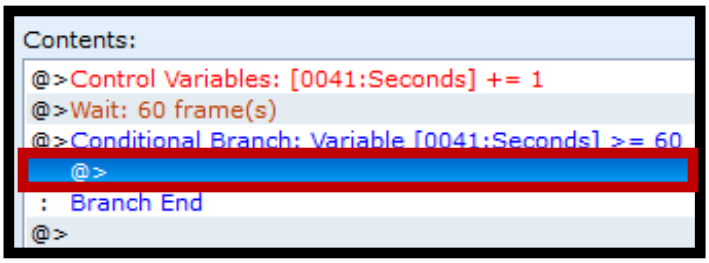


8. **Double-click** the space **between**:

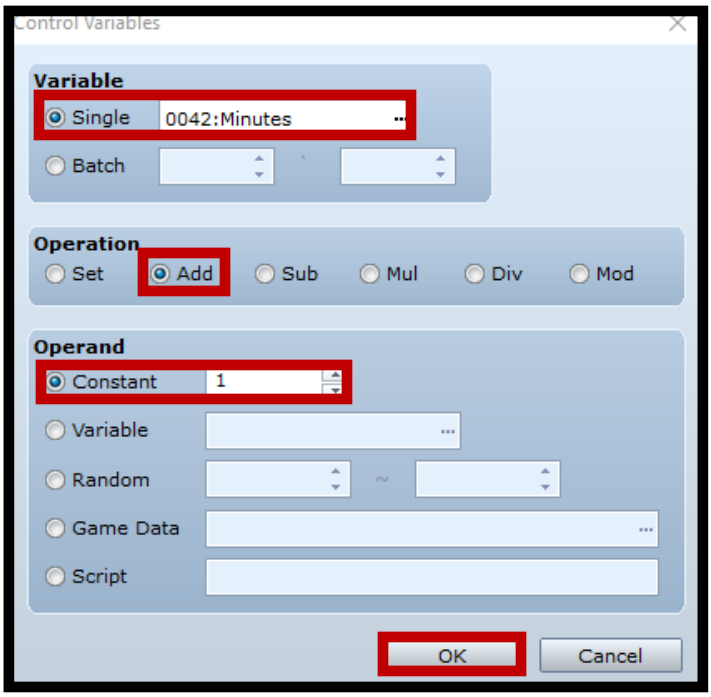
   Conditional Branch: Variable [XXXX:Seconds] >= 60

   And:

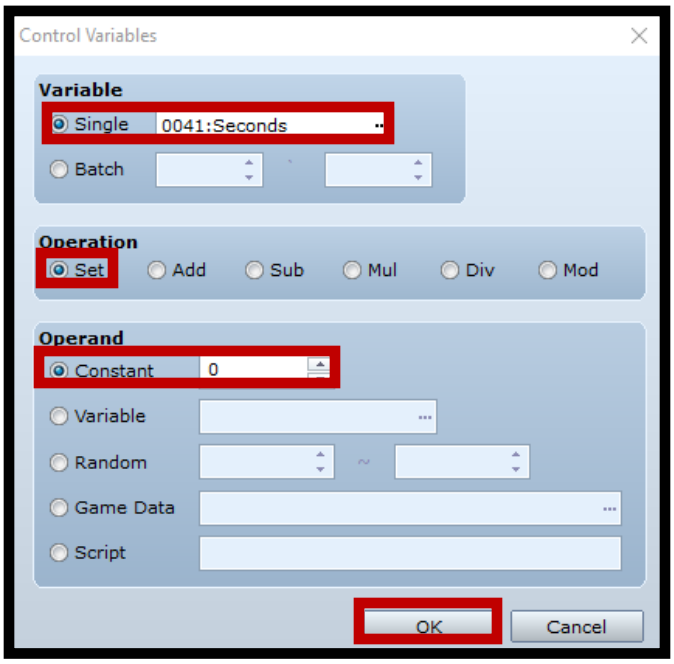
   Branch End



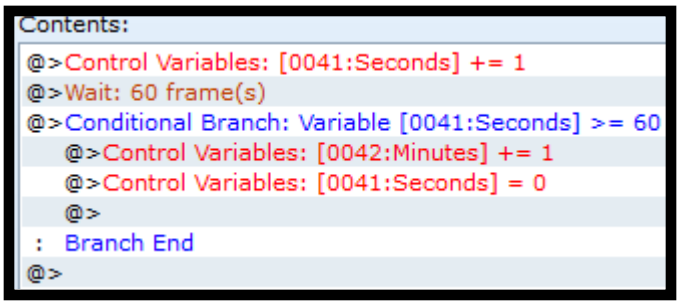
9. **Click Control Variables. Set** the **Variable** to **Minutes,** set the **Operation** to **Add,** set the **Operand** to **Constant "1". Click OK.**



10. **Double-click inside** the **conditional. Click Control Variables⋯, set** the **Variable** to **Seconds**, the **Operation** to **Set**, and the **Operand** to **Constant "0"**. **Click OK**.



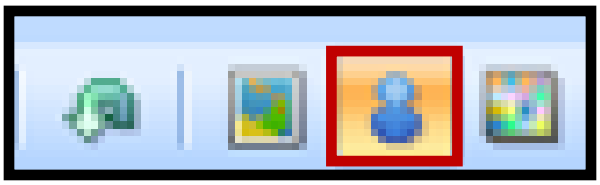
We have now **set real-time tracking to the minute**:



Section 4: Create the event which will be controlled by the real-time tracking

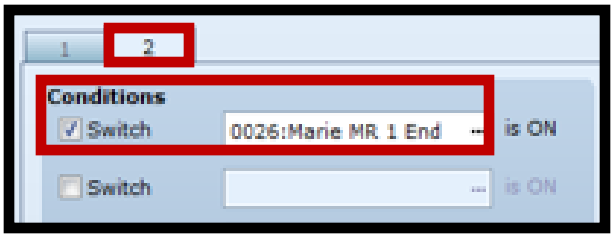
Now create the event which will use the real-time tracking. Without an event to apply the tracking to, the system is useless. In this case, the event will be a character.

1. **Double-click** on any **Tile** in a **Map** while in **Event mode** to create a new **Event**.

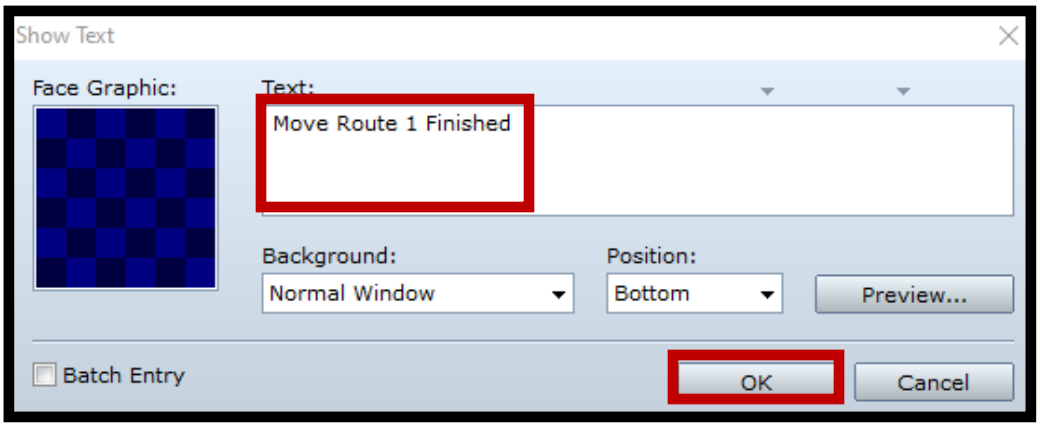


2. **Set Trigger** to **Action Button**, **check Walking Anim.** in Options, **set Priority** to **Same as Characters,** and **set** the Event's **Graphic** to something that you will be able to see.

3. **Click New Event Page**. **Set the same** as the last page. **Check Switch** in the Conditions section and **set** "**(Character) MR 1 End**".



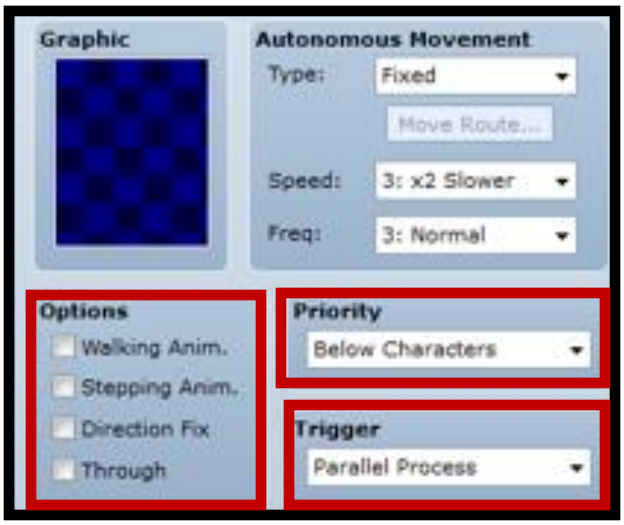
4. **Double-click** in the **Event Contents, click Show Text.** Write **“Move Route 1 Finished”. Click OK**. **Click Ok** in the Event to save.



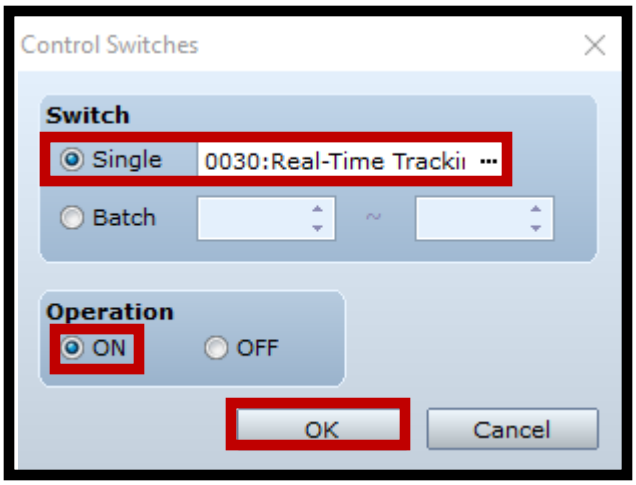
Section 5: Tie your real time-tracking to an action

Now you will make the event controlled by the real-time tracking perform an action. In this case, the action will be a move route. The character will move one step to the right and jump, then their interactable dialogue will say that they finished their move route.

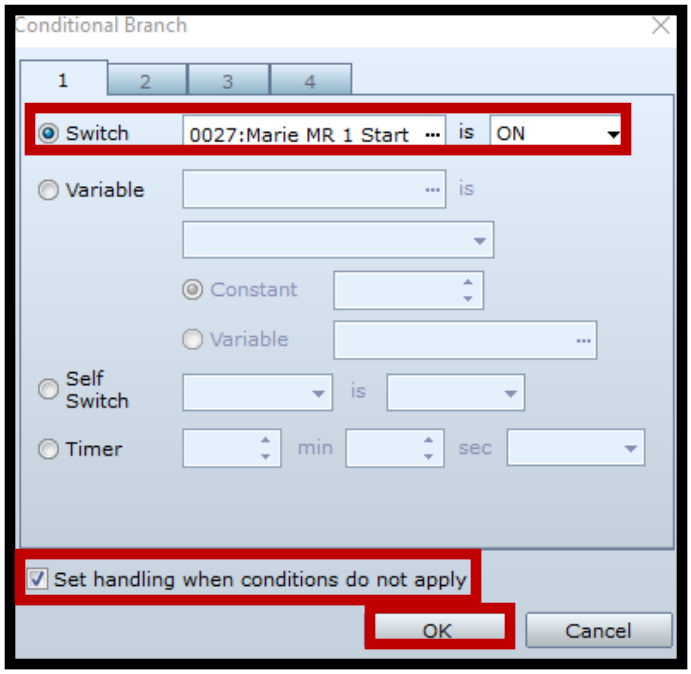
1. **Double-click** on any **Tile** in the Map to create a new event. **Uncheck Walking Anim.**, **set** the **Priority** to **Below Characters** and set its **Trigger** to **Parallel Process**.



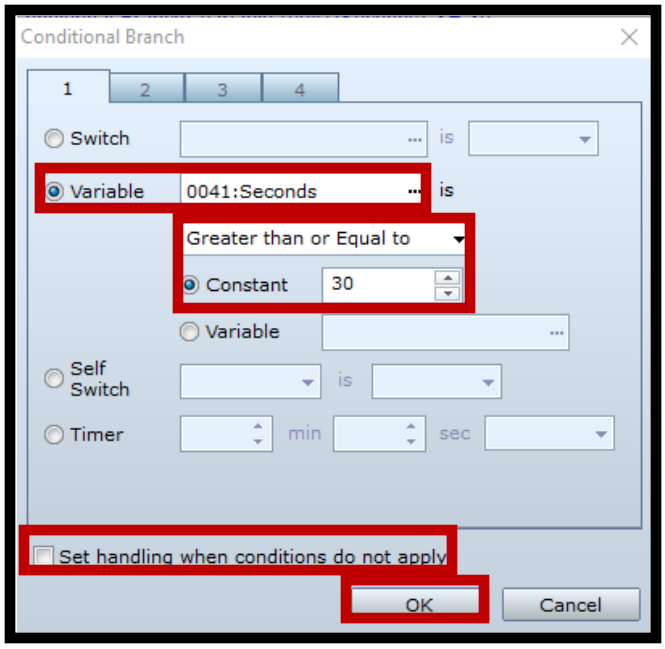
2. Double-click in the Event Contents and choose Control Switches…. Set it to Real-Time Tracking and set the Operation to ON.



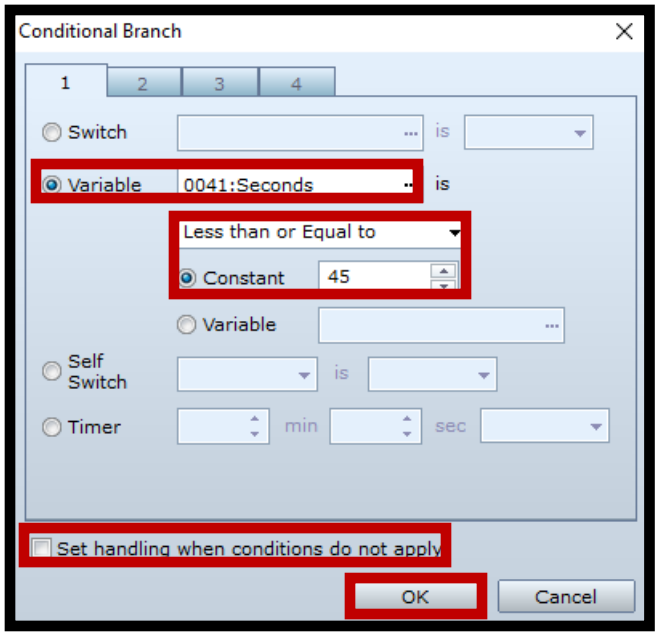
3. **Double-click** in the Event Contents and choose **Conditional Branch…**. Ensure **Set handling when conditions do not apply** is **checked** and **set** the conditional to **Switch** and set the Switch to "**(Character) MR 1 Start" ON**. **Click OK.**



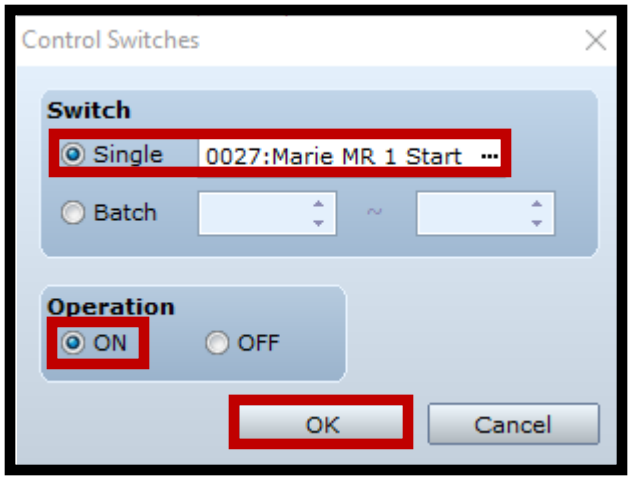
4. **Double-click** below Else and click **Conditional Branch…, set** to **Variable**, set Variable to **Seconds**, set to **Greater than or Equal to** and **Constant** to **30**. **Set handling when conditions do not apply** is **unchecked**. **Click OK.**



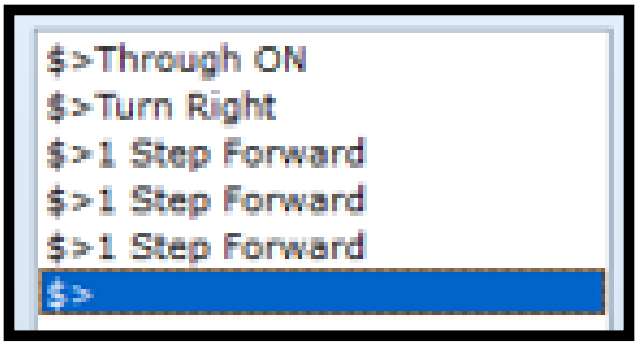
5. **Double-click** inside, click **Conditional Branch…, set** to **Variable**, set Variable to **Seconds**, set to **Less than or Equal to** and **Constant** to **45**. **Set handling when conditions do not apply** is **unchecked**. **Click OK.**



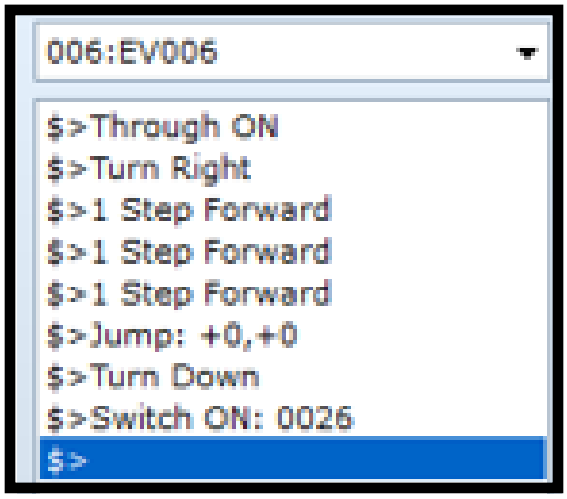
6. Inside, **double-click,** choose **Control Switches⋯,** and set Switch to "**(Character) MR 1 Start"** and Operation to **ON**.



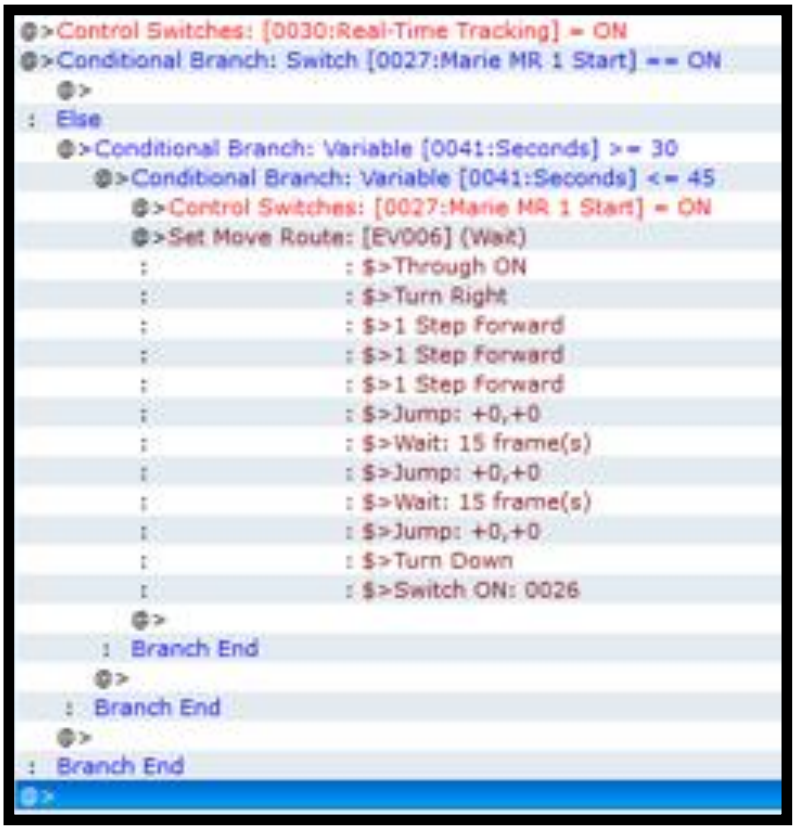
7. Below the Control Switches command, **double-click** and go to **page 2**. **Click Set Move Route⋯**. **Set** it to apply **to your character Event** in the top left. Press **Through ON**, **Turn Right** and **1 Step Forward**.



8. **Click Jump⋯** and **set** both **X+:** and **Y+:** to **0**. Press **Turn Down**, **Switch ON⋯** and set to "**(Character) MR 1 End**". **Wait for Completion** is **checked** and press **OK**.



Our event will turn right, walk forward, jump, turn down, and then make them say our completion phrase when interacted with.



Conclusion:

Congratulations, you have now created a real-time tracking system and an event that acts upon it. You can set as many degrees as you want (Such as hours, days, weeks…) and can add as many move routes as you want. You can also set different scaling to make the game slower or faster.

Troubleshooting:

If you encounter any issues in the system check:

1. Correct switches are being used.
2. Commands are inside conditional branches.
3. You saved each command **and** event.

Commands Used:

- Control Variables: [Variable] [Operation] [Value]
- Wait: [Time]
  Conditional Branch: [Option] [Condition]
- Text: [text]
- Control Switches: Switch [Switch] [Status]
- Set Move Route: [Event] [Actions] [Options]