

This document captures ideas, experiences, and informal recommendations from the Yaskawa Partner Support team. It is meant to augment – not supersede manuals or documentation from motoman.com. Please contact the Partner Support team at partnersupport@motoman.com for updates or clarification.

MotoSim 3DPDF Tips

Introduction

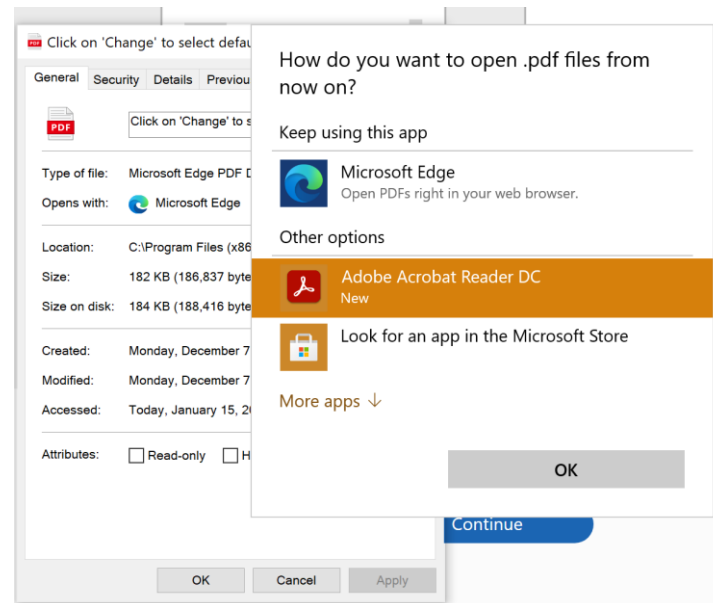
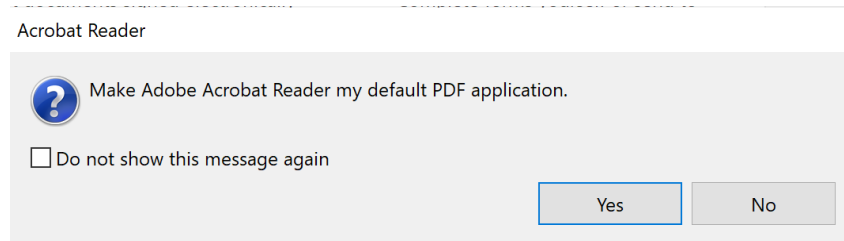
MotoSim can create interactive reports that allow the user to not only see the resulting cycle-time but also playback and interact with the simulation using just a PDF. It is called a 3DPDF. Below are tips for how to make use of a MotoSim 3DPDF after it has been created.

Turning the feature on

First, it is recommended to make Acrobat the default PDF application instead of a web browser.

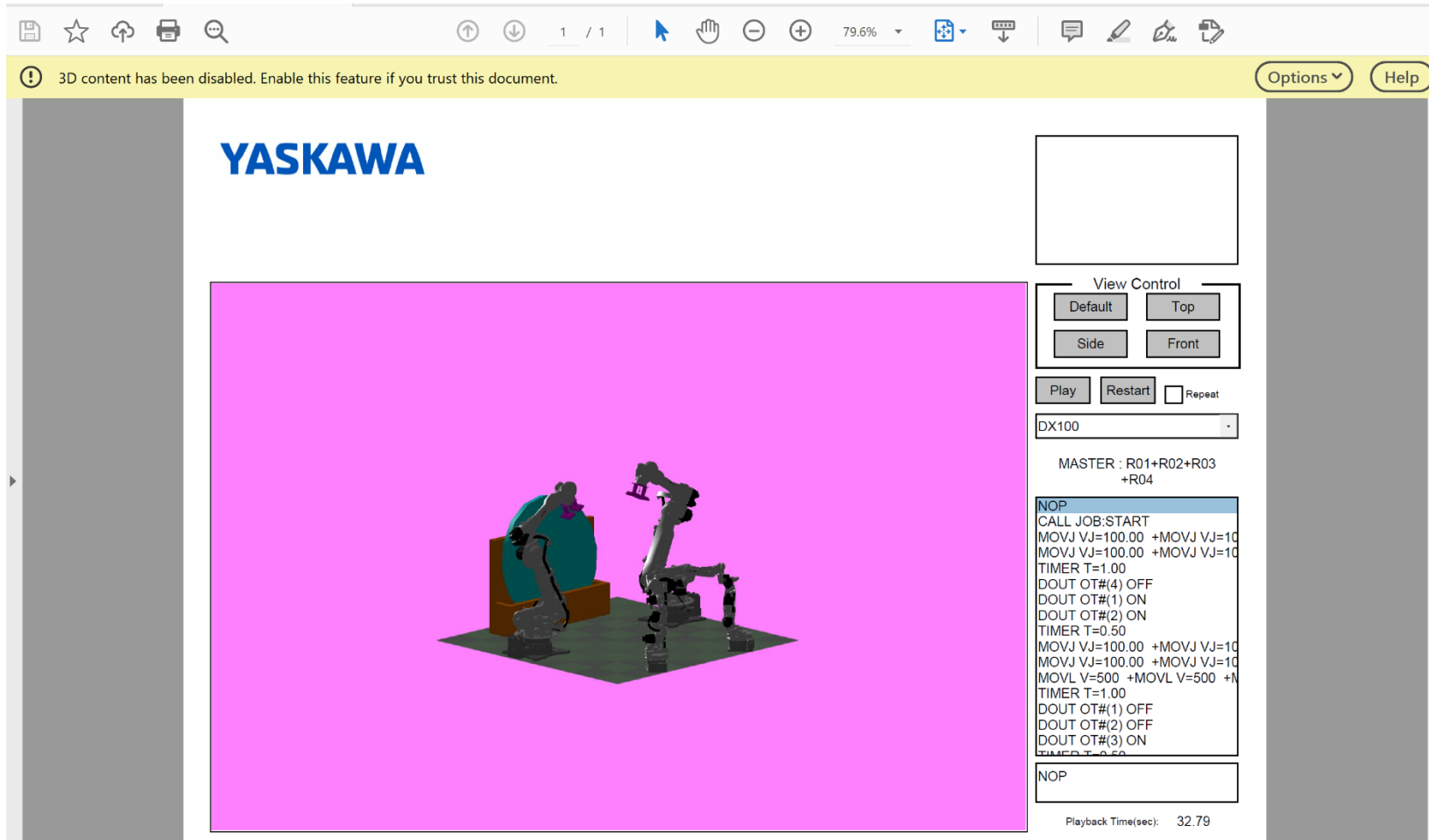
By opening Acrobat for the first time, it will ask if you want to make it your default pdf viewer.

1. Select Yes
2. In the next window change from the browser to Acrobat



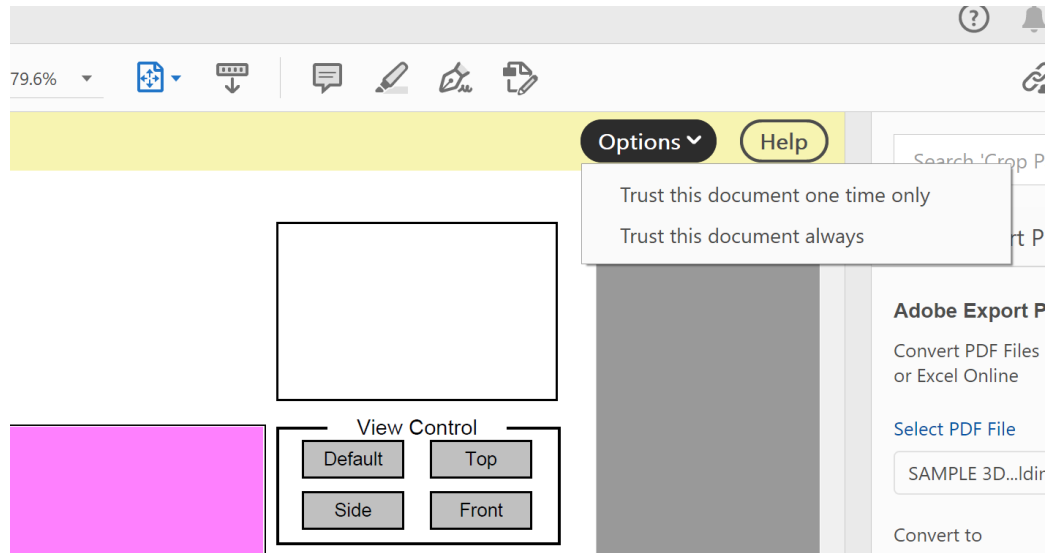
This document captures ideas, experiences, and informal recommendations from the Yaskawa Partner Support team. It is meant to augment – not supersede manuals or documentation from motoman.com. Please contact the Partner Support team at partnersupport@motoman.com for updates or clarification.

When opening a 3DPDF in Acrobat for the first time it is common to see a pink background with reminder that 3D content has been disabled.



This document captures ideas, experiences, and informal recommendations from the Yaskawa Partner Support team. It is meant to augment – not supersede manuals or documentation from motoman.com. Please contact the Partner Support team at partnersupport@motoman.com for updates or clarification.

A quick way to enable it is to press the options button and select “Trust this document always” or “Trust the document one time only” (if there are security concerns).

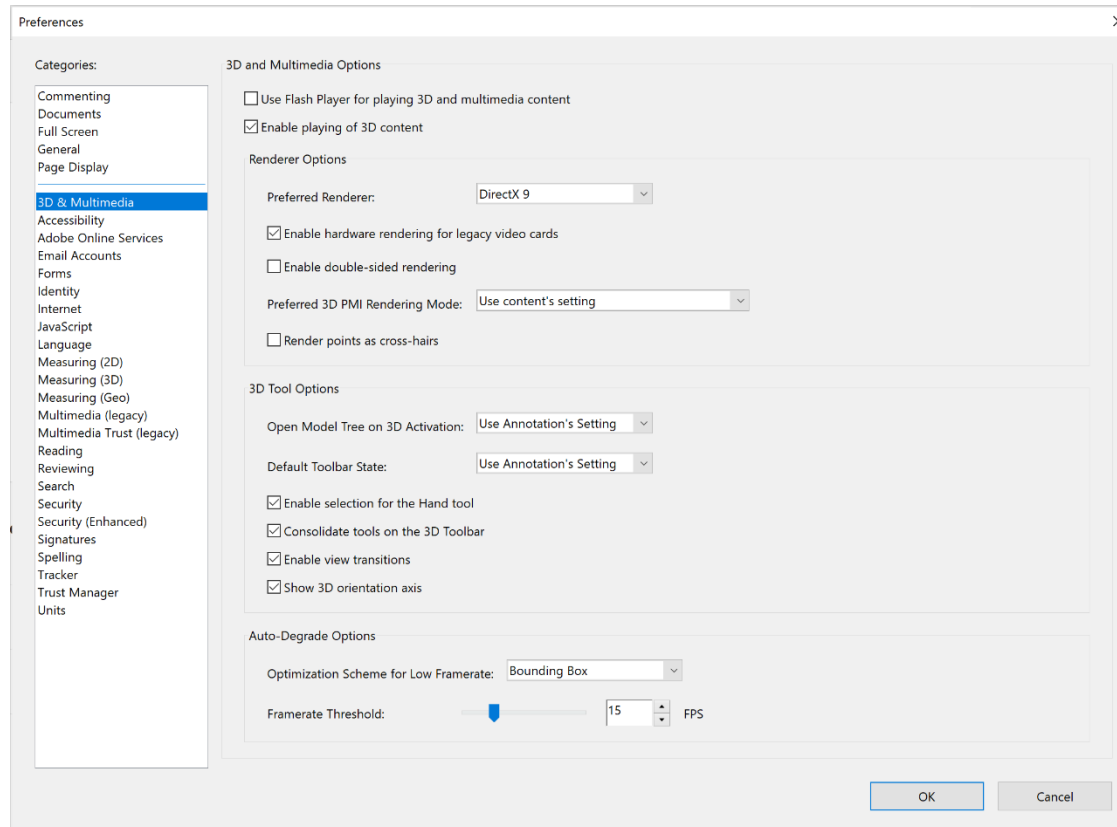


This document captures ideas, experiences, and informal recommendations from the Yaskawa Partner Support team. It is meant to augment – not supersede manuals or documentation from motoman.com. Please contact the Partner Support team at partnersupport@motoman.com for updates or clarification.

A Permanent Solution is to turn on 3D Content in the Preferences.

1. Select the Edit Menu
2. Select Preferences
3. Select 3D & Multimedia
4. Check the box “Enable Playing of 3D Content”
5. Select OK

All future 3DPDF’s will now open correctly without further user input.



This document captures ideas, experiences, and informal recommendations from the Yaskawa Partner Support team. It is meant to augment – not supersede manuals or documentation from motoman.com. Please contact the Partner Support team at partnersupport@motoman.com for updates or clarification.

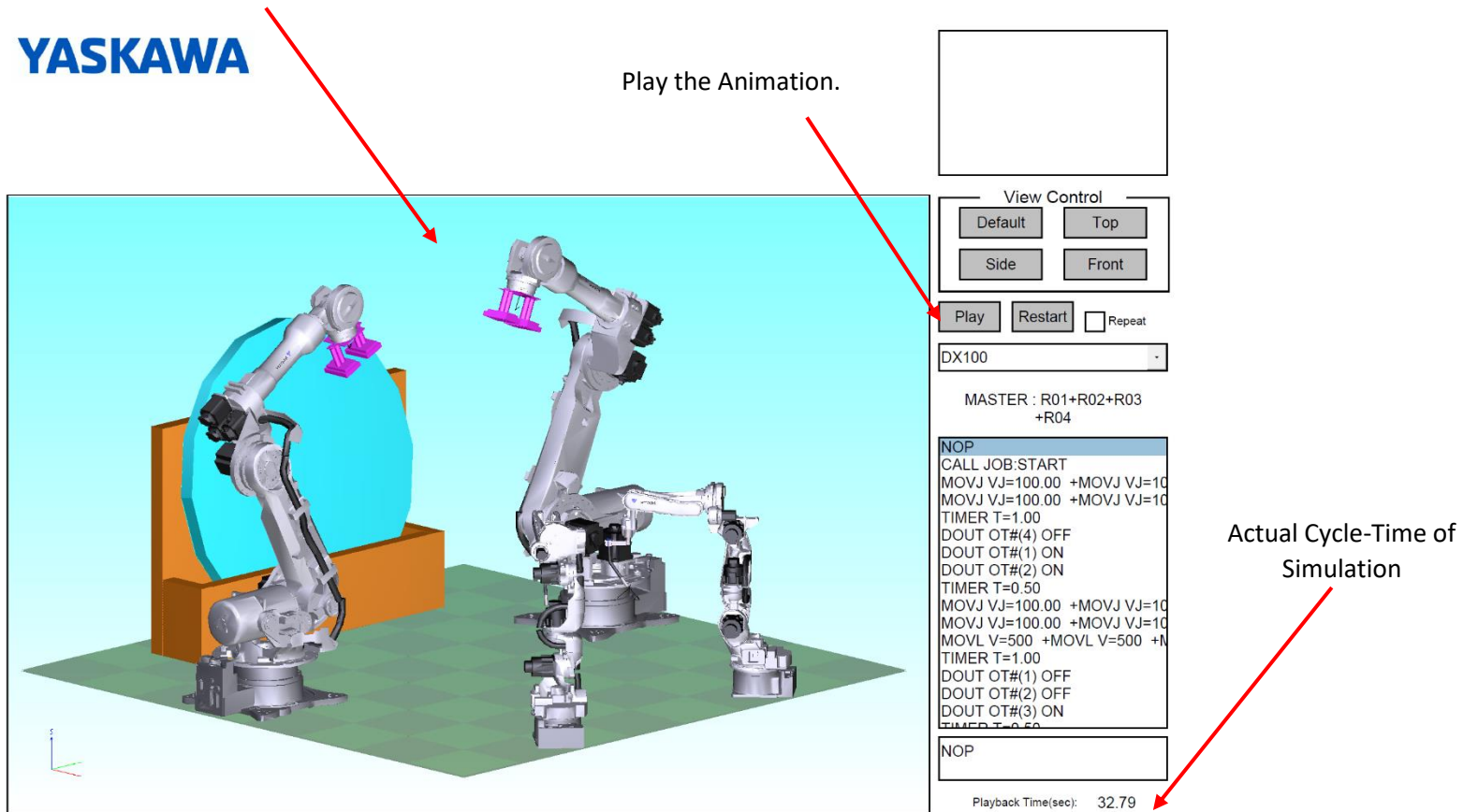
Using a MotoSim 3DPDF

The mouse will manipulate the 3D scene, even while it animates:

Left Button: **Rotates Model**

Right Button: **Zoom In/Out**

Left + Right Buttons: **Pan Model**



The screenshot displays the Yaskawa MotoSim 3DPDF interface. On the left, a 3D simulation shows two robotic arms in a light blue environment. A red arrow points from the Yaskawa logo to the simulation area. On the right, a control panel is visible. A red arrow points from the text "Play the Animation." to the "Play" button in the control panel. Below the control panel, a code window shows the simulation program. A red arrow points from the text "Actual Cycle-Time of Simulation" to the "Playback Time(sec): 32.79" value at the bottom of the code window.

YASKAWA

Play the Animation.

View Control

Default Top

Side Front

Play Restart Repeat

DX100

MASTER : R01+R02+R03
+R04

```
NOP
CALL JOB:START
MOVJ VJ=100.00 +MOVJ VJ=10
MOVJ VJ=100.00 +MOVJ VJ=10
TIMER T=1.00
DOUT OT#(4) OFF
DOUT OT#(1) ON
DOUT OT#(2) ON
TIMER T=0.50
MOVJ VJ=100.00 +MOVJ VJ=10
MOVJ VJ=100.00 +MOVJ VJ=10
MOVL V=500 +MOVL V=500 +M
TIMER T=1.00
DOUT OT#(1) OFF
DOUT OT#(2) OFF
DOUT OT#(3) ON
TIMER T=0.50
NOP
```

Playback Time(sec): 32.79

Actual Cycle-Time of Simulation

This document captures ideas, experiences, and informal recommendations from the Yaskawa Partner Support team. It is meant to augment – not supersede manuals or documentation from motoman.com. Please contact the Partner Support team at partnersupport@motoman.com for updates or clarification.

Troubleshooting Issues

Problem	Solution
Cannot view the 3D content	Make sure the pdf is being opened in Acrobat reader and not a web browser
	If the 3D window is pink in Acrobat, make sure to enable 3D content by default and re-open the document
The 3DPDF is open, but the screen is all WHITE	It can take up to a minute or so to load 3DPDF's, depending on their complexity.