34. Control Token (cMT / cMT X)

This chapter explains how to use Control Token.

34.1.	Overview	. 34-2
34.2.	Configuration	. 34-2
34.3.	Demonstration	. 34-4



34.1. Overview



One cMT / cMT X HMI can be simultaneously controlled by multiple cMT Viewer clients. To ensure system safety by preventing an object to be controlled by multiple clients simultaneously, a control token can be set. Only one cMT Viewer client can acquire the control token at a time, and only the cMT Viewer client that acquires control token can operate the object. The rest of the clients can acquire the token one by one when the token is not occupied.

34.2. Configuration

Click [Project] » [Control Token] to open the settings window.



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Control Token



Setting	Description	
Description	Specify the name of the selected control token.	
	Control Token – Local Only	
	When this token is selected, only the local HMI can	
	operate the object. This token is available only for	
	models that have built-in cMT Viewer: cMT3072,	
	cMT3090, cMT3151, cMT-HDMetc.	
Acquire Type	Select an acquire type from [Auto] or [Manual].	
	Auto	
	With this option selected, cMT Viewer will	
	automatically acquire the control tokens set for all	
	objects in the current window. The control token will	
	be released after leaving this window.	
	Manual	
	The control token can be acquired or released by	
	triggering an Action Trigger or a Combo Button.	
Idle Timeout	Setting Idle Timeout helps avoid the issue that	
	prevents other users from gaining operating right	
	when the token possessor, having finished operation,	
	does not release the control token. When the token	
	possessor's HMI remains inactive (no touch operation)	
	for a given time period, the control token will be	

released.

The setting range allowed for Idle Timeout is 0~86400 seconds. For "Control Token- Local Only", the Idle Timeout can only be zero and is not adjustable.

Note

- Control tokens are allocated on a first come first served basis, and a control token can be possessed by one cMT Viewer client at a time. Attempts made for acquiring a control token when it is unavailable will be put into a queue, and it becomes available, it will be passed to the next one in the queue.
- A cMT Viewer client can simultaneously possess multiple control tokens.
- In Auto mode, when changing to a new window, even if the object with the same control token appears in both previous and new window, the control token is reacquired upon entering the new window. If the object with the control token is placed in an overlay window or a common window, and the same overlay window is used in both previous and new window, then reacquiring control token will not take place.
- When cMT Viewer client is disconnected from the Server, and the connection is recovered within 30 seconds, reacquiring control token is not necessary. When the disconnection goes longer than 30 seconds, reacquiring control token is necessary.

34.3. Demonstration

To monitor idle time countdown, use an ASCII object with system register PLW-11998. When two or more control tokens are used, this system register will count down from least idle time until elapsed.

In the following example, on the top, ASCII object shows idle time countdown from PLW-11998. The bottom two objects use two different control tokens, one with a 5-second idle time and the other 15-second. When running simulation, PLW-11998 will count down from five seconds.



PLW-11998					
	5				
5 :	seconds	15 seconds			
	0	0			

After 5 seconds, the bottom left object turns grey due to expired control token, and another object has 10 seconds left for countdown.

PLW-11998			
10			
5 seconds	15 seconds		
Ο	0		

