

# CIMCO DNC-Max Cycle Start and Cycle Stop Monitoring

The CIMCO DNC-Max Monitoring function utilises the Fanuc Macro-B functions to passively monitor Cycle Start and Cycle Stop. The following describes how to set it up:

Insert a Macro Call Command at the beginning of the NC Program, right after the 'O-number', and another Macro Call Command at the end, just before 'M30'. These quite simple macros utilise the DPRNT declaration to transmit a short character string from the serial port of the CNC.

At the beginning of all NC programs, insert this Macro Call:

- O9xxxx
- POPEN
- DPRNT[START]
- PCLOS
- M99

At the end of all NC programs, insert this Macro Call:

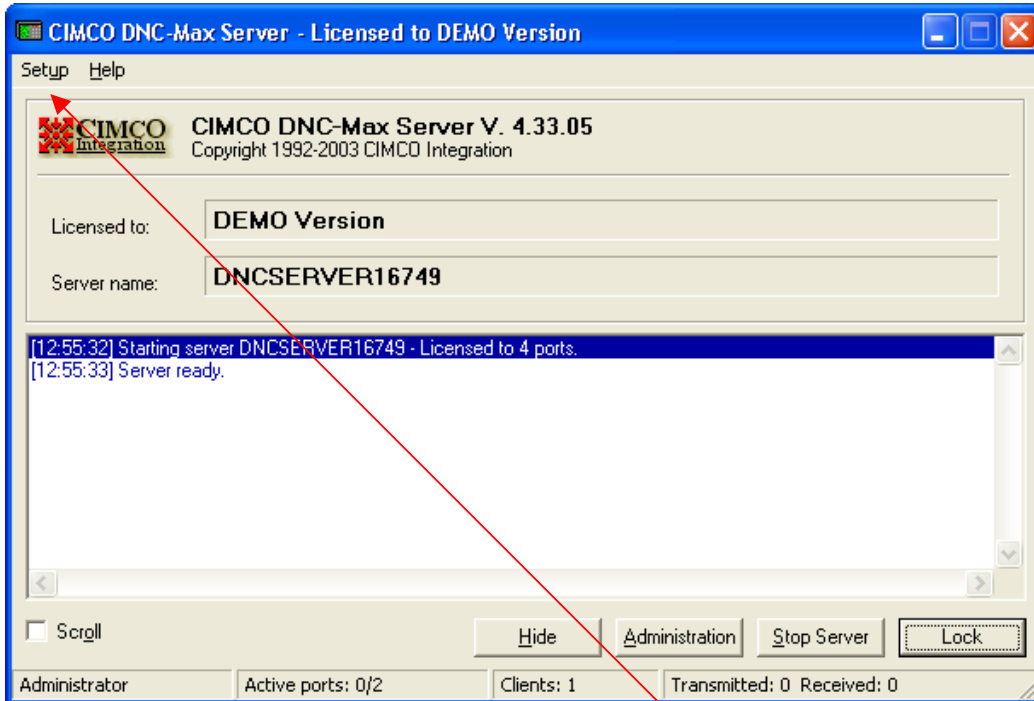
- O9xxxx
- POPEN
- DPRNT[STOP]
- PCLOS
- M99

DNC-Max will now passively monitor all serial ports simultaneously.

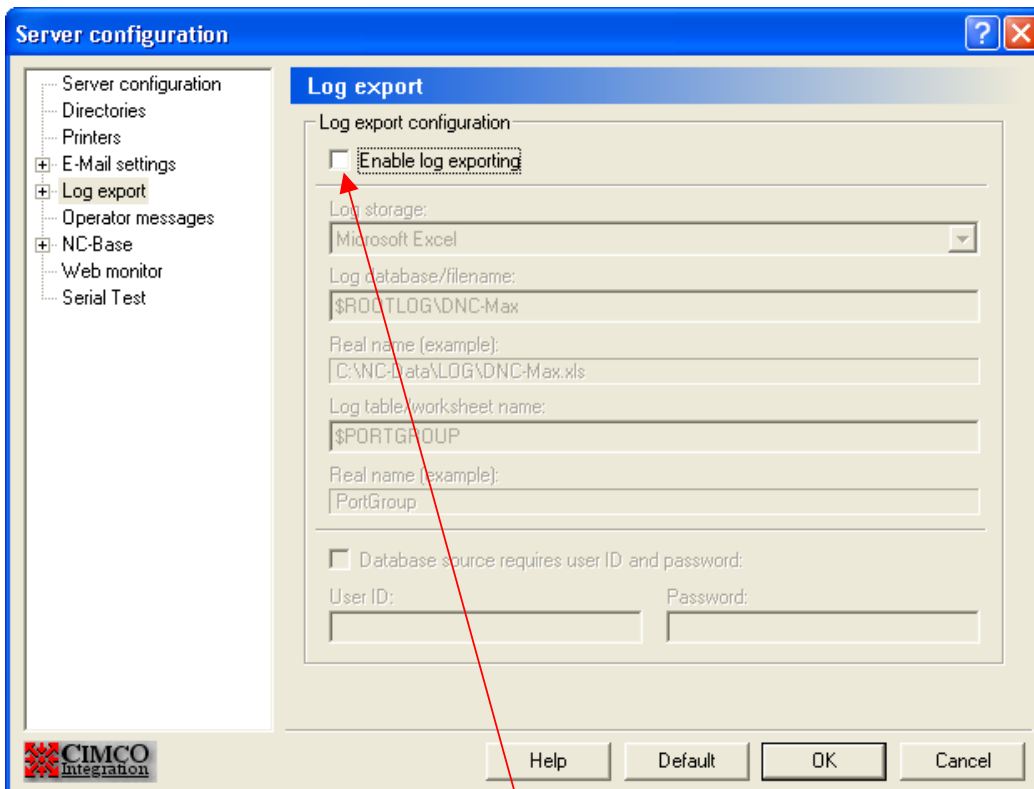
DNC-Max can now be configured to write to an Excel spreadsheet, which will then show time of day of tooling start and end.



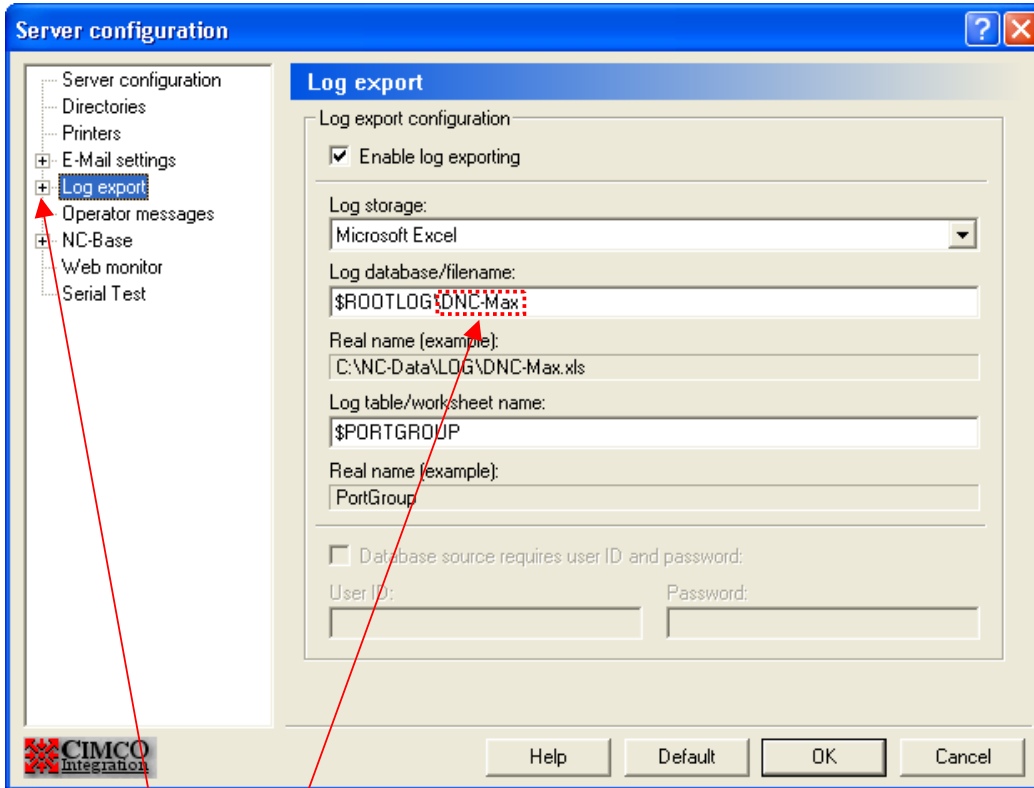
Double-click on the CIMCO DNC-Max Server icon in the Windows System Tray



Click on Setup, then select Configure Server.

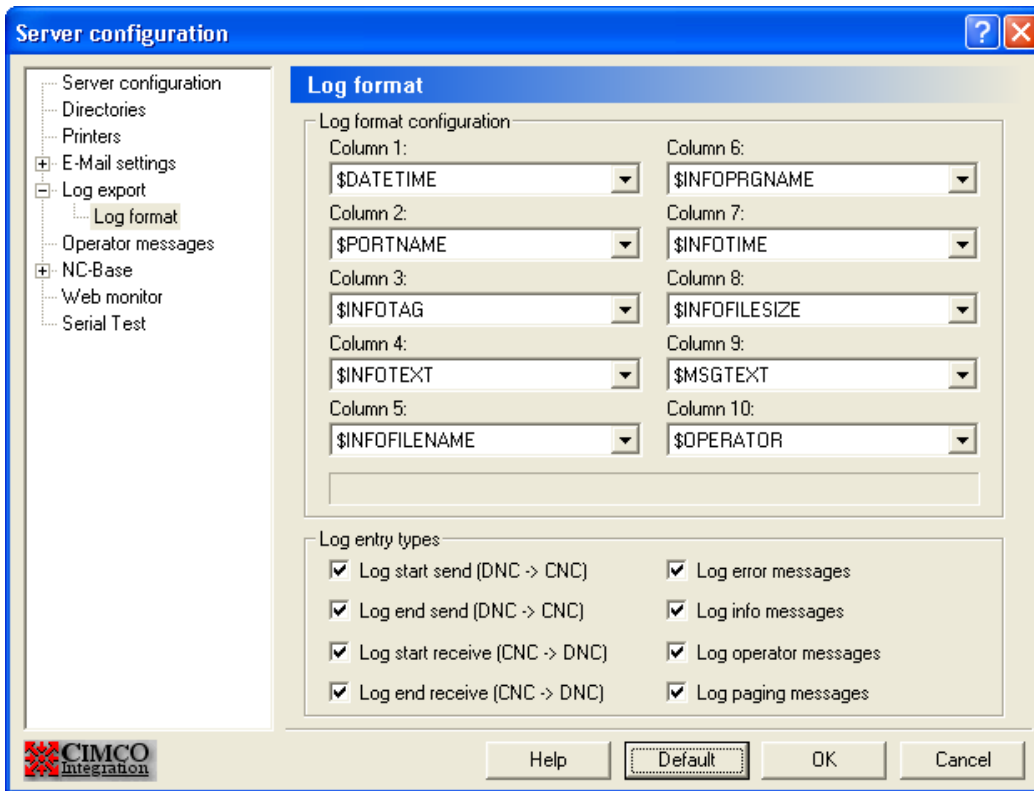


Activate Enable log exporting.

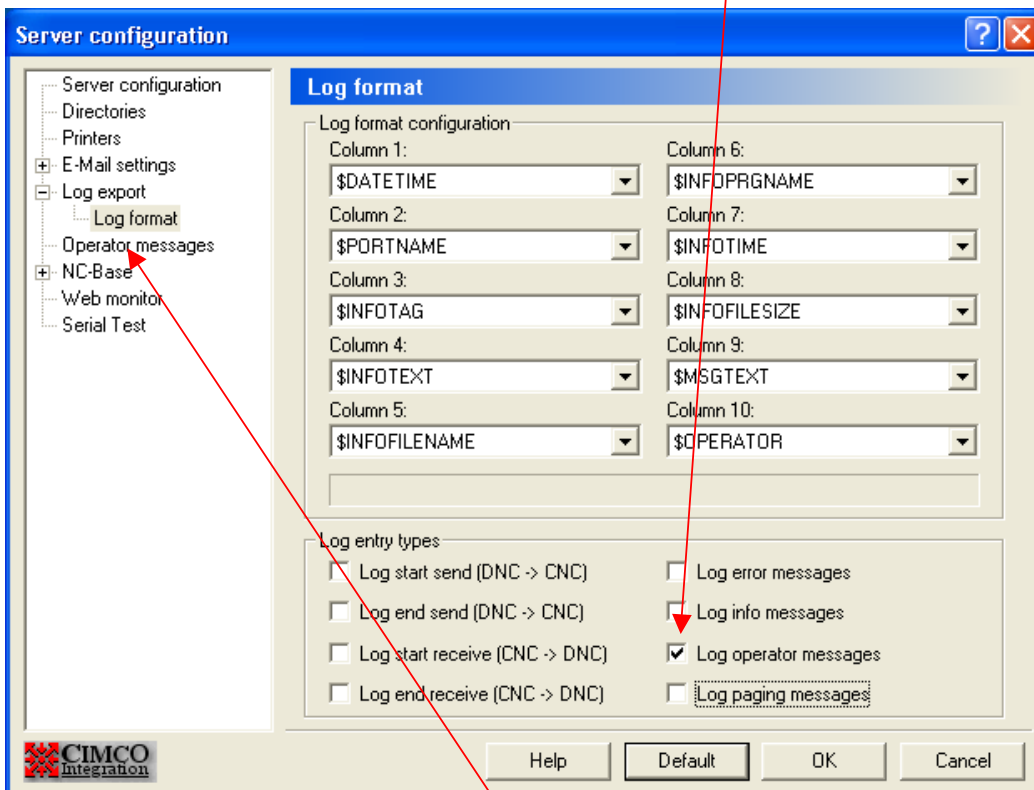


Type the name of your Excel spreadsheet after '\$ROOTLOG'. Default is 'DNC-Max'. The '.xls' extension is added automatically.

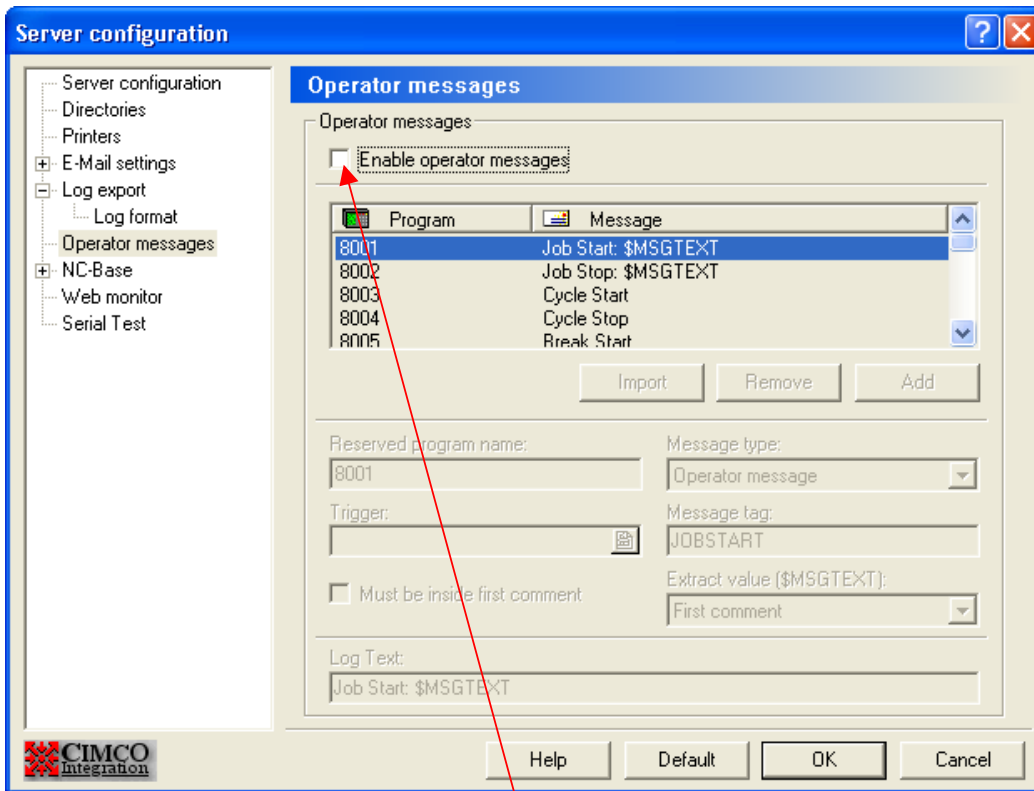
Click on the '+' next to 'Log export' and select Log format.



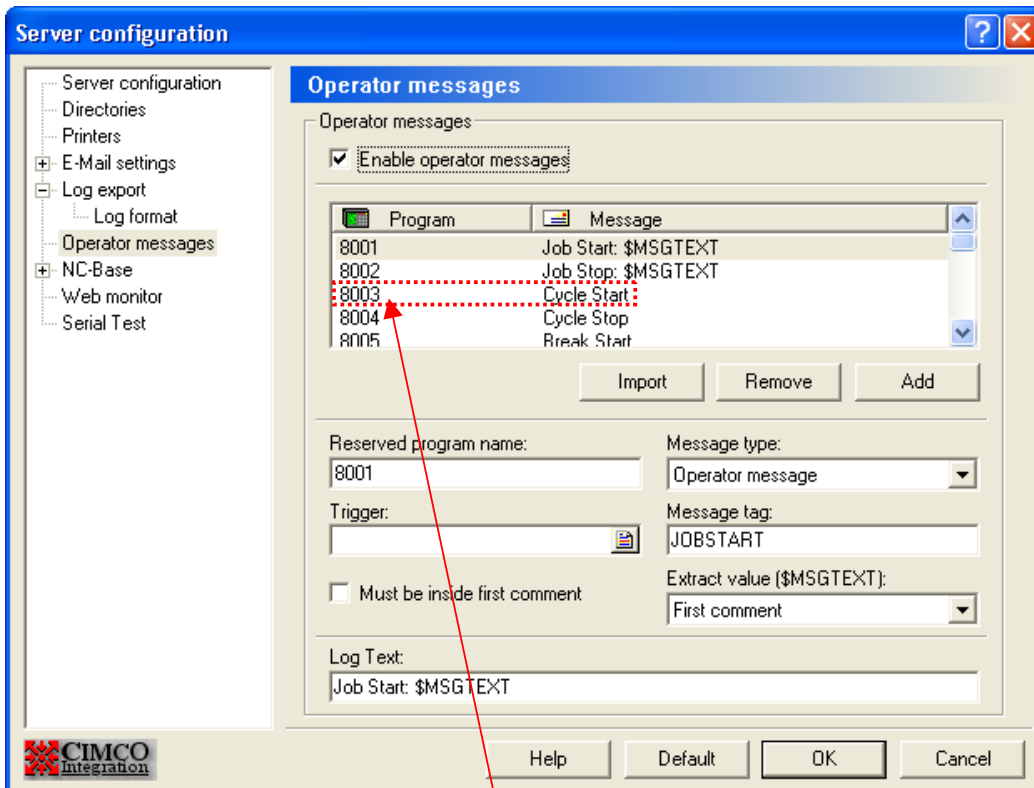
De-activate all Log entry types except Log operator messages.



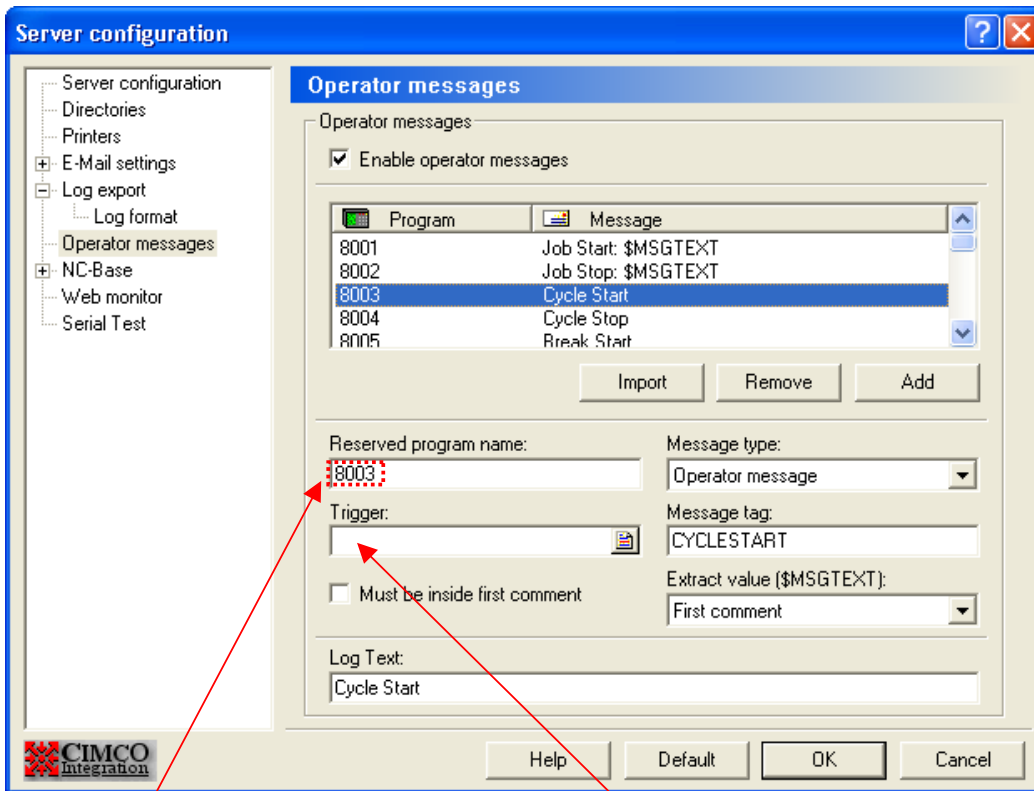
Click on Operator messages.



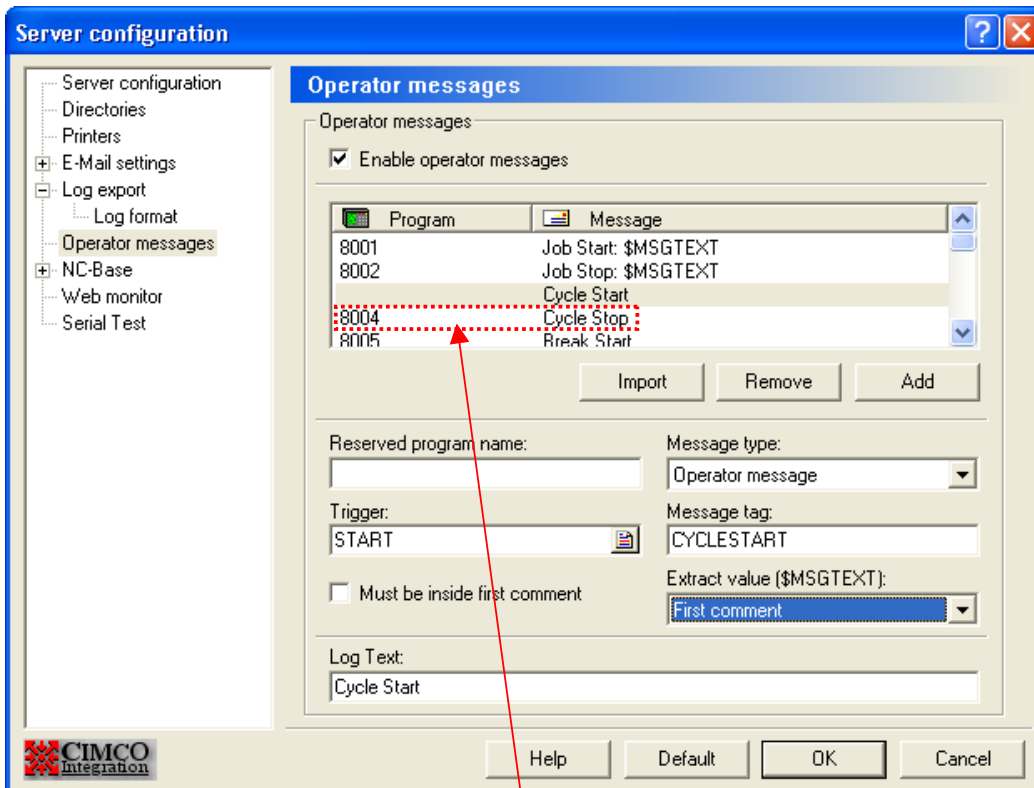
Activate Enable operator messages.



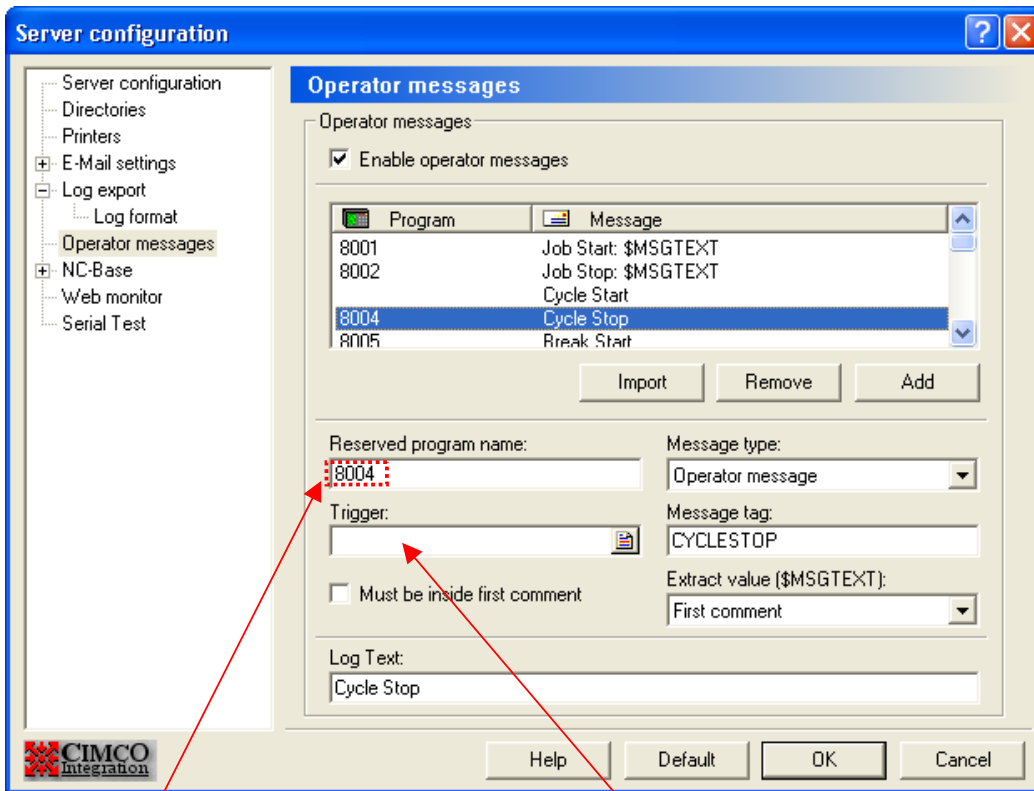
Click on '8003 Cycle Start'.



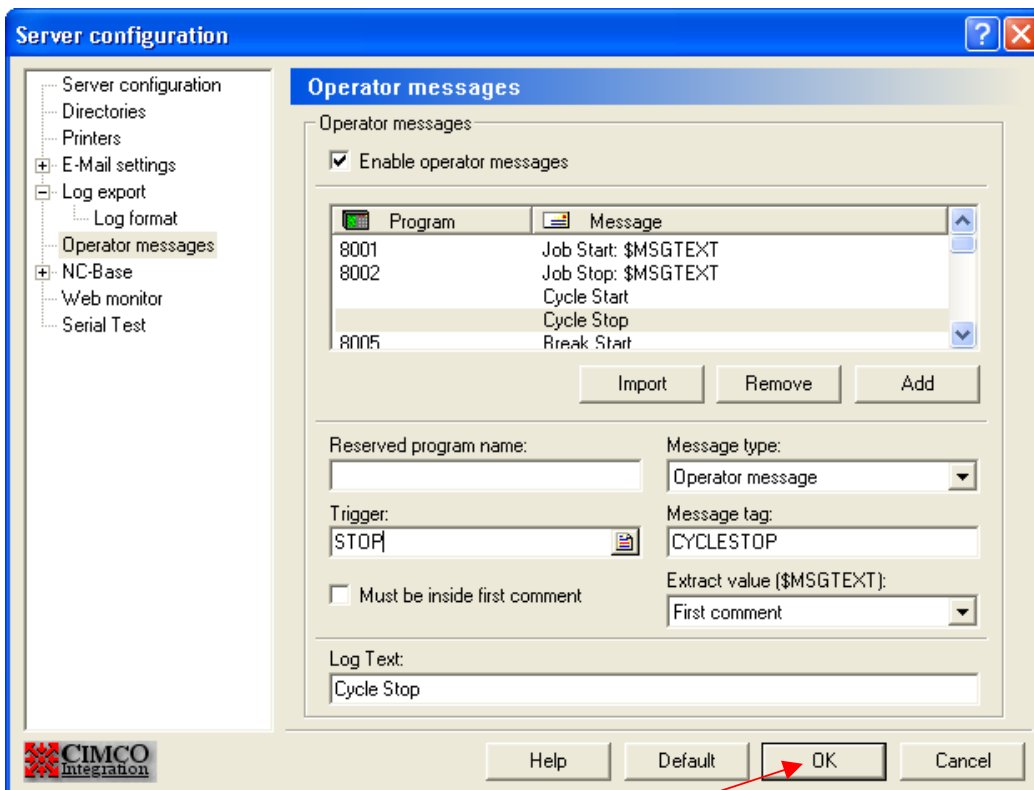
Erase Reserved program name 8003, type START in the Trigger field.



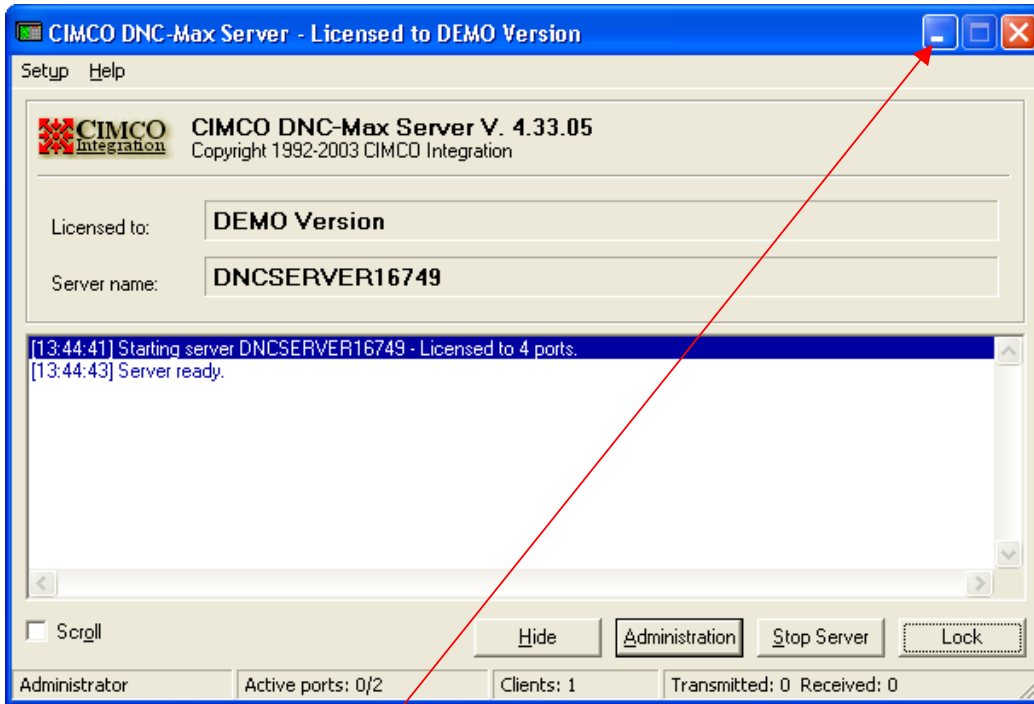
Click on '8004 Cycle Stop'.



Erase Reserved program name 8004, type STOP in the Trigger field.



Click OK.



Minimize Cimco DNC-Max Server.



Cimco DNC-Max Server icon will be placed in the Windows System Tray.

You are now ready to test, whether any data import to your Excel spreadsheet. Run an NC program from the control. Make sure the two macro programs are copied into the program as shown on page 1 of this guide. You should now be able to open your Excel spreadsheet and monitor online when the execution of the program starts on your machine, and when it is finished. In this case you will find the spreadsheet at **C:\NC-Data\Log\DNC-Max.xls** (default).



Microsoft Excel - DNC-Max.xls

Filer Rediger Vis Indsæt Formater Funktioner Data Vindue Hjælp

MS Sans Serif 10

	A	B	C	D	E	F	G	H	I	J
1	Datetide	Portname	Infoteg	Infotext	Infofilenavn	Infooprnavn	Infotime	Infofilesize	Msgtext	Operator
2	23-01-2004 15:54:24	FANUC_TRIGGERPRG_LCJ	CYCLESTART	Cycle Start			0	0	Trigger Start	NONE
3	23-01-2004 19:55:07	FANUC_TRIGGERPRG_LCJ	CYCLESTOP	Cycle Stop			0	0	Trigger Stop	NONE
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*LCJ-Cimco Integration*