

TINE Studio News

June 8, 2015

Instant Client

- It can do everything and now even more!
- Table: Problem with multiple contexts fixed ...
- A new 'delta -T' column ...

The screenshot shows the Java Instant Client window. The interface includes a menu bar (File, Options, Data Transfer, Monitor Options, Information, Help) and several configuration fields. The 'Context' is set to LINAC2, 'Subsystem' to ALL, 'Server' to PiaIdc, and 'Device' to IMD-PIA20. The 'Property' is StromPEj. The 'Data Size' is 1 and 'Data Type' is FLOAT. The 'Data' field contains 'PIA Ejection e+ current in mA'. The 'Timeout' is 1000. A table displays the following data:

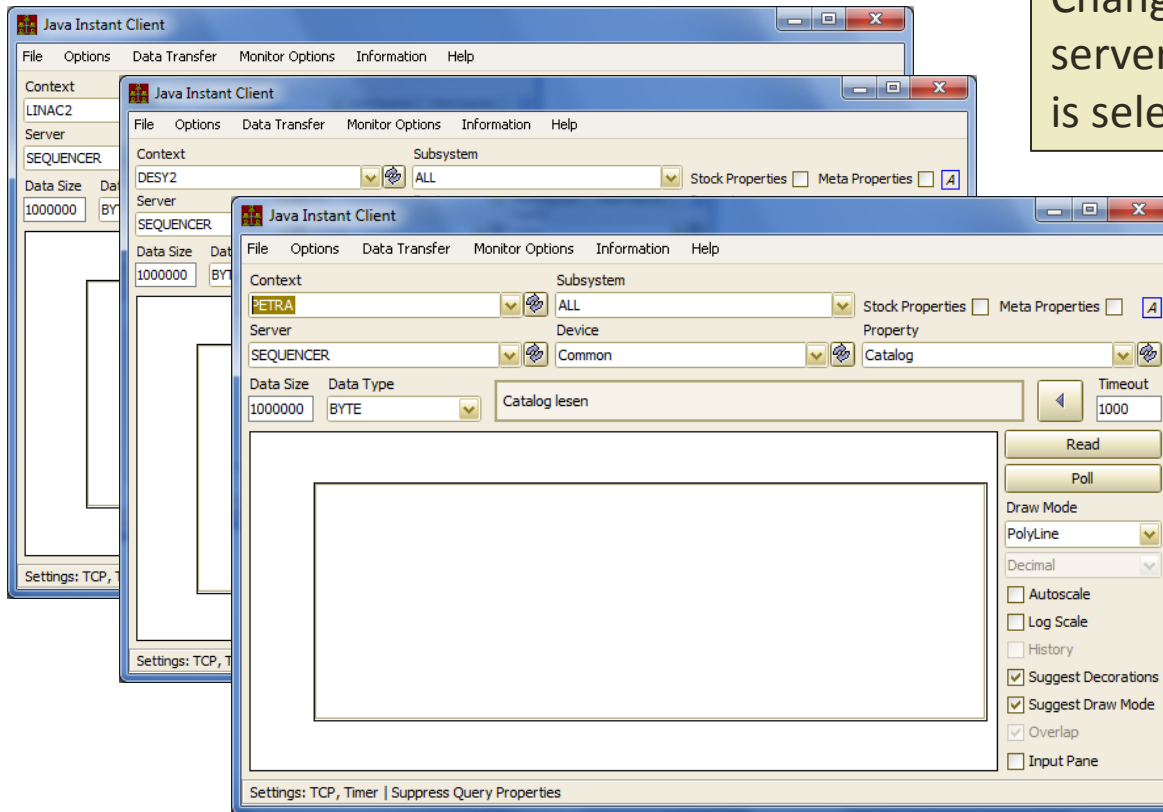
Address	Description	Units	Δt	Value
PETRA/Idc/Buffer-0/I	DC Strom	mA	0.884 s, 6 cycles	99.33456
DESY2/Bunche.DE05/IMA-DE05/BunchStrom	IMA-DE05 Max 100 t...		0.960 s, 6 cycles	1.809337
LINAC2/Bunche_L2/IMA-GUN/BunchStrom	Amplitude in mA		0.000 s, 0 cycles	36.580482
LINAC2/PiaIdc/IMD-PIA20/StromEj	PIA Ejection current ...		0.160 s, 1 cycles	32.887566
LINAC2/PiaIdc/IMD-PIA20/StromPEj	PIA Ejection e+ curr...		0.159 s, 1 cycles	0.0

Additional controls include 'Read', 'Stop', 'Draw Mode' (set to Table), 'Decimal' (set to Decimal), and checkboxes for 'Autoscale', 'Log Scale', 'History', 'Suggest Decorations', 'Suggest Draw Mode', 'Overlap', and 'Input Pane'. 'Load', 'Save', and 'Clear Table' buttons are also present. The status bar at the bottom shows 'Settings: TCP, Timer | Suppress Query Properties, Property Query Precedence'.

Instant Client

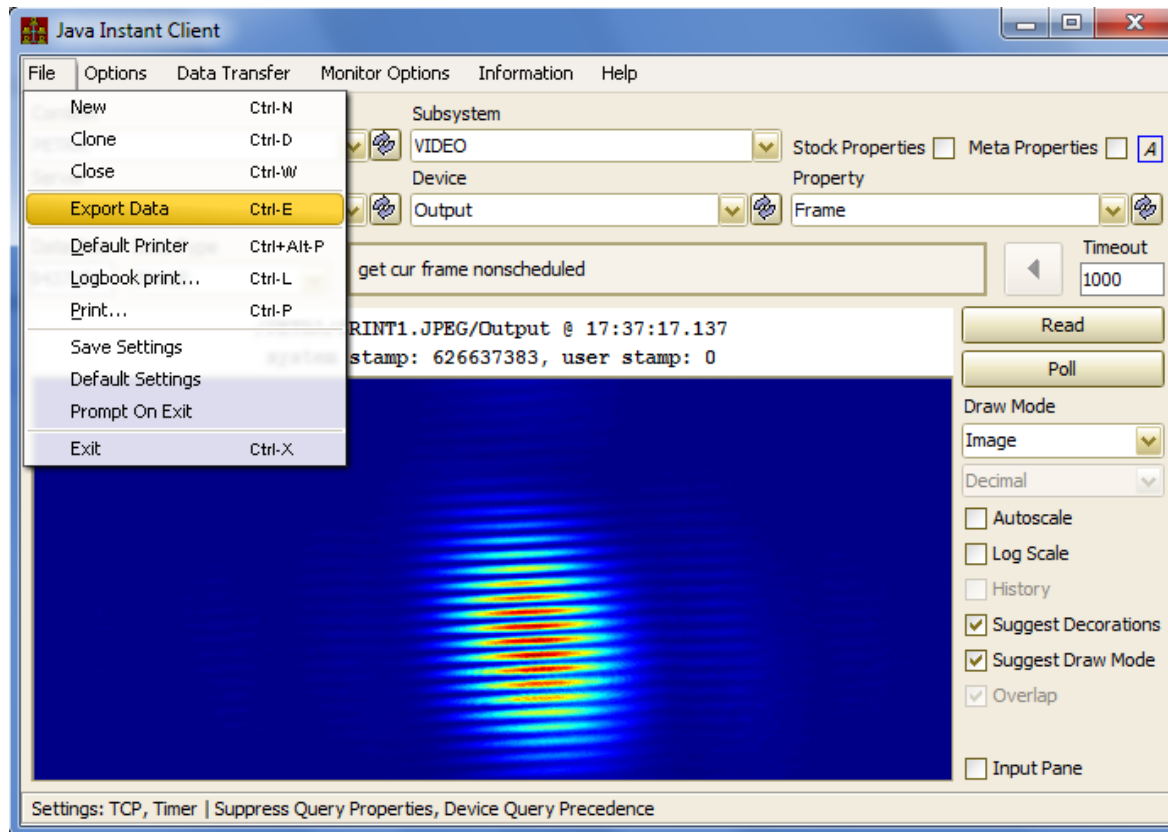
- 'sticky' server entry

Change context : Same server entry (if it exists) is selected ...



Instant Client

- Save acquired data to file ...



Instant Client

- Stress test ...

The screenshot displays the Java Instant Client interface. The main window shows a menu with 'Stress Test' highlighted. A dialog box titled 'Stress Test' is open, prompting the user to 'Enter the number of requests to make:' with the value '1000' entered in the text field. The 'Stop on first error:' checkbox is unchecked. Below the dialog, a graph titled '/PETRA/BLM/PU01I LossRates @ 17:39:32.650 system stamp: 626638215, user stamp: 0' shows a line graph with a y-axis labeled 'Requests' ranging from 0 to 35000 and an x-axis with labels PU01I, PU030_I, PU100, and Scr5WR020_U. The graph shows a very low number of requests, with a small spike at the end. The main window also shows various settings and a 'Read' button.

Settings: TCP, Timer | Suppress Query Properties

Archive Database Manager

- Database 'access lock'

The screenshot displays the Archive Database Manager (PETRA) interface. The main window is titled 'Archive Database Manager: PETRA' and features a menu bar with 'File', 'Configurations', 'Navigate', 'Options', and 'Help'. The left pane shows a table of 'Database Entries' with columns for Index, Active, Device Server, Device Name, and Device Property. The right pane shows configuration options for 'Index: 3', including 'Data Collection Configuration', 'Device Context', 'Device Name', 'Device Property', 'Format', 'Filtering', and 'Property Viewing Configuration'. A dialog box titled 'Database Not Locked' is overlaid on the right pane, displaying an information icon and the message: 'Please, lock the database before making any changes.' with an 'OK' button. The dialog box is positioned over the 'Device Context' and 'Device Name' fields, which are highlighted with red arrows. The 'Device Context' field is set to 'PETRA' and the 'Device Name' field is set to '#0'. The 'Device Property' field is set to 'Idc'. The 'Format' field is set to 'FLOAT'. The 'Filtering' section has checkboxes for 'NEVER', 'SLOW', 'VOLATILE', 'NOPOI', 'BEAM', and 'RUNNING'. The 'Property Viewing Configuration' section shows a table with columns for Keyword, Data Format, Size, Units, Max, and Min. The table contains one row: 'TauArrayDC', 'FLOAT', '3', 'hr', '20.0', '0.0'. The 'Abs. Tolerance' is '0.05', 'Rel. Tolerance' is '0.0', 'Plot Style' is 'LIN', 'Offset' is '0.0', and 'Scale' is '1.0'. The 'Description' is 'Beam Lifetime (Array)' and the 'Subsystem' is 'Diagnostics'. The 'Bind To' and 'Spectrum Axis' fields are empty. The 'Apply', 'Add', and 'Remove' buttons are at the bottom right of the configuration pane. At the bottom of the main window, there are buttons for 'Reload DB', 'Write DB', 'Lock DB', and 'DB unlocked'.

Index	Active	Device Server	Device Name	Device Property
1	ENABLED	Idc	#0	Current
2	ENABLED	Idc	#0	Tau
3	ENABLED	Idc	#0	TauArray
12	ENABLED	BunchScope	#0	I.Bunch
13	ENABLED	BunchScope Idc	#0	I.Bunch.NAM
19	ENABLED	ALARMSTATE	#0	ISREADY
20	ENABLED	ALARMSTATE	#0	NOTREADYCOUNT
21	ENABLED	ALARMSTATE	#0	NOTREADYRUNNING
22	ENABLED	ALARMSTATE	#0	DEVICES
23	ENABLED	BunchScope	#0	I.Sum
24	ENABLED	Bunche_EWeg	IMA-E03	BunchPartidesE9
26	ENABLED	Bunche_EWeg	#0	BunchPartidesE9.NAM
28	ENABLED	GlobalsCollector	keyword	MachineStateText
29	ENABLED	GlobalsCollector	keyword	BeamPermissionText
30	ENABLED	GlobalsCollector	keyword	MagnetCurrentPermissio...
38	ENABLED	BunchScope	#0	Bunch.N
39	ENABLED	GlobalsCollector	#0	Energy
40	ENABLED	VAC.ION_PUMP	*	p
41	ENABLED	VAC.ION_PUMP	*	p
46	ENABLED	PiCoPy	halleNIDclosed	expertState
47	ENABLED	Idc	#0	Ladung
60	ENABLED	Cms.PsGroup	EwCorr	GroupDevices
61	ENABLED	Cms.PsGroup	EwCorr	Strom.Ist
62	ENABLED	Cms.PsGroup	EwCorr	Strom.Ims
63	ENABLED	Cms.PsGroup	EwCorr	Strom.Soll
64	ENABLED	Cms.PsGroup	EwMain	GroupDevices
65	ENABLED	Cms.PsGroup	EwMain	Strom.Ist
66	ENABLED	Cms.PsGroup	EwMain	Strom.Ims
67	ENABLED	Cms.PsGroup	EwMain	Strom.Soll
74	ENABLED	NEG.ABSCHNITTE	#0	GpDruck.NAM
75	ENABLED	NEG.ABSCHNITTE	#0	GpDruck
76	ENABLED	NEG.STROMKREISE	#0	CAct.NAM
77	ENABLED	NEG.STROMKREISE	#0	CAct
78	ENABLED	NEG.STROMKREISE	#0	VAct
84	ENABLED	Terminal owner	#0	TERMINAL CURRENT ARRAY

Archive Database Manager

- Database 'access lock'

Archive Database Manager: PETRA

File Configurations Navigate Options Help

Database Entries

Index	Active	Device Server	Device Name	Device Property
1	ENABLED	Idc	#0	Current
2	ENABLED	Idc	#0	Tau
3	ENABLED	Idc	#0	TauArray
12	ENABLED	BunchScope	#0	I.Bunch
13	ENABLED	BunchScope	#0	I.Bunch.NAM
19	ENABLED	ALARMSTATE	#0	ISREADY
20	ENABLED	ALARMSTATE	#0	NOTREADYCOUNT
21	ENABLED	ALARMSTATE	#0	NOTREADYRUNNING
22	ENABLED	ALARMSTATE	#0	DEVICES
23	ENABLED	BunchScope	#0	I.Sum
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46	ENABLED	PiCoPy	halleNIDclosed	expertState
47	ENABLED	Idc	#0	Ladung
60	ENABLED	Cms.PsGroup	EwCorr	GroupDevices
61	ENABLED	Cms.PsGroup	EwCorr	Strom.Ist
62	ENABLED	Cms.PsGroup	EwCorr	Strom.Ims
63	ENABLED	Cms.PsGroup	EwCorr	Strom.Soll
64	ENABLED	Cms.PsGroup	EwMain	GroupDevices
65	ENABLED	Cms.PsGroup	EwMain	Strom.Ist
66	ENABLED	Cms.PsGroup	EwMain	Strom.Ims
67	ENABLED	Cms.PsGroup	EwMain	Strom.Soll
74	ENABLED	NEG.ABSCHNITTE	#0	GpDruck.NAM
75	ENABLED	NEG.ABSCHNITTE	#0	GpDruck
76	ENABLED	NEG.STROMKREISE	#0	CAct.NAM
77	ENABLED	NEG.STROMKREISE	#0	CAct
78	ENABLED	NEG.STROMKREISE	#0	VAct
84	ENABLED	Terminal	#0	TERMINAL ARRAY

Reload DB Write DB Unlock DB DB locked by DUVAL

Index: 3 Tweak Clone New Add MCA Names

Data Collection Configuration

Device Context: PETRA **Device Server:** Idc

Device Name: #0 **Device Property:** TauArray

Format: FLOAT **Array Size:** 3 **Input Format:** NULL **Data Input:**

Filtering of Data Storage:

NEVER ONCE ALWAYS FAST

SLOW FIXTIME HRT STATUS

VOLATILE NOPOI BEAM RUNNING

Access Rate: 1000 ms

Archive Heartbeat: 900 sec

Property Viewing Configuration

TauArrayDC,FLOAT,3,hr,20.0,0.0,0.05,0.0,LIN,1.0,0.0,Beam Lifetime (Array),,,Diagnostics

Maximum size [bytes]: 12 Remaining elements: 0

Keyword	Data Format	Size	Units	Max	Min
TauArrayDC	FLOAT	3	hr	20.0	0.0

Abs. Tolerance: 0.05 **Rel. Tolerance:** 0.0 **Plot Style:** LIN **Offset:** 0.0 **Scale:** 1.0

Description: Beam Lifetime (Array) **Subsystem:** Diagnostics Associate:

Bind To: Spectrum Axis: Min Max Units

Apply Add Remove

Archive Database Manager

- Database 'access lock'

Database Entries

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61	ENABLED	Cms.PsGroup	EwCorr	Strom.Ist
62	ENABLED	Cms.PsGroup	EwCorr	Strom.Ims
63	ENABLED	Cms.PsGroup	EwCorr	Strom.Soll
64	ENABLED	Cms.PsGroup	EwMain	GroupDevices
65	ENABLED	Cms.PsGroup	EwMain	Strom.Ist
66	ENABLED	Cms.PsGroup	EwMain	Strom.Ims
67	ENABLED	Cms.PsGroup	EwMain	Strom.Soll
74	ENABLED	NEG.ABSCHNITTE	#0	GpDruck.NAM
75	ENABLED	NEG.ABSCHNITTE	#0	GpDruck
76	ENABLED	NEG.STROMKREISE	#0	CAct.NAM
77	ENABLED	NEG.STROMKREISE	#0	CAct
78	ENABLED	NEG.STROMKREISE	#0	VAct
84	ENABLED	Terminal	#0	TERMINAL ARRAY

Data Collection Configuration

Index: Tweak Clone New Add MCA Names

Device Context Device Server

Device Name Device Property

Format **Array Size** **Input Format** **Data Input**

Filtering of Data Storage

NEVER ONCE ALWAYS FAST

SLOW FIXTIME HRT STATUS

VOLATILE NOPOI BEAM RUNNING

Access Rate 1000 ms

Archive Heartbeat 900 sec

Property Viewing Configuration

Maximum size [bytes]: 0 Remaining elements: 0

Keyword	Data Format	Size	Units	Max	Min
	NULL	1		1	0

Abs. Tolerance **Rel. Tolerance** **Plot Style** **Offset** **Scale**

Description **Subsystem** Associate:

Bind To: Spectrum Axis:

Apply Add Remove

Reload DB Write DB Unlock DB DB locked by DUVAL

FEC Remote Panel

Can now launch the FEC Statistics Panel targeting the selected server !

The screenshot displays the 'Server and FEC Remote Control Panel for DESY2'. The main window is divided into several sections:

- Server List:** A table listing various servers and their configurations. The 'DEL-VXW' server is highlighted in yellow.
- Server Details:** A pane on the right showing details for the selected server, including version (4.05.0007), address (131.169.128.228), and location (bldg 20 rm SER D6 (1)).
- Summary:** A section at the bottom left showing 'Selected Subsystems' with checkboxes for DIAG, HIST, INJ, INSTR, MAG, MEX, MISC, PINTLK, RF, SER, TIM, VAC, VIDEO, WDOG, and TEST. It also shows 'FEC Importance' set to 'ALL' and 'OS Color Code' for 'Dos Unix VxWorks VMS Win16 Win32 Java'.
- Commands Tab:** A tab at the bottom right with a red circle around the 'FEC Statistics' button. Other buttons include 'Report', 'Attach FEC', 'Ping', 'Control', and 'Restart'.

Server Name	Configuration
ALARMSTATE	D2TRIMT.CDI
ALMSTATE	D2VAC.CDI
AMVAC.CDI	D2WdwProxy
ARCHIVER	DEL-VXW
BeamRates.TB21	DESYDATA
BeamRates.TB22	DESYGLOBALS
BeamRates.TB24	DESYSTATE
BeamRateServer	DE_DN_Control
Bunche.DE05	DE_DN_Cy28
Bunche.DE17	DE_DN_Cy30
BunchStrom_IMA	DE_DN_Cy32
Calendar	DE_DN_Cy34
CAS	DE_DN_Generator
CAS.ARCHIVE	DE_DN_Kfy
Chop.CDI	DE_DN_Mod
Chop.FanAnCo	DE_DN_TRANSMITTER
Chop.MMM	DE_DS_Control
Chop.Par	DE_DS_Cy04
Chop.Power	DE_DS_Cy06
Chop.PowerState	DE_DS_Cy08
Chop.Push	DE_DS_Cy10
Chop.TimeStore	DE_DS_Kfy

Property	Value
Version	4.05.0007
OS	VXWORKS
Address	131.169.128.228
Port Offset	0
Host Computer	mskd2etgppc1.desy.de
Responsible	mkibri brede hkay robmeyer torna
Description	ETG_UTZ_SRV
Location	bldg 20 rm SER D6 (1)
Importance	CRITICAL
Server App. Version	1.00.0000

Activity	Contracts	Clients	Alarms	Log Files	Stats	Histories	Commands	Settings	IC
FEC: ETG_UTZ_SRV4									
Ave Busy Time (%)	0								
Cycle Counts	70								
Max Cycle Counts	152								
Sgl Link Counts	1647447								
Client Misses	974607								
Client Reconnects	198								
Client Retries	372								
Contract Misses	0								
Contract Delays	0								
Burst Limit Reached Count	0								
Data Timestamp Offset (ms)	0								

TINE Watchdog GUI

- Minor tweaks ...

The screenshot displays the TINE Watchdog GUI with the following sections:

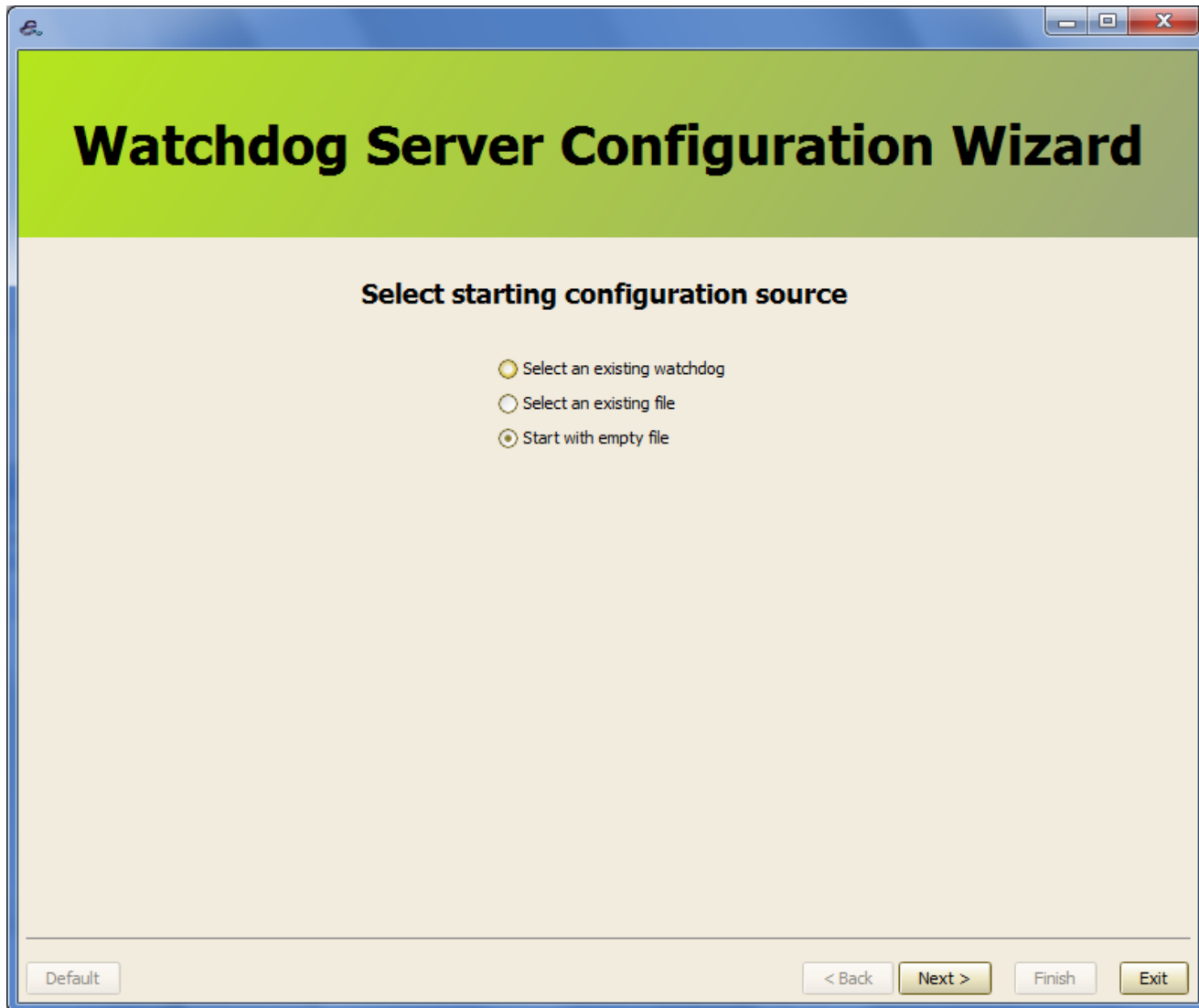
- Context:** SERVICE (dropdown), Server: WD_accxciens1 (dropdown), Reload button, Watchdog Subsystem Only checkbox.
- Selected Watchdog Server:**
 - Total CPU Usage: 6%, Watchdog CPU: 0%
 - Available Memory: 344.27 MB, Watchdog Memory: 312.89 MB
 - Remaining Time: 0 s
 - Buttons: Reload, Reboot
- Network Load:**

	lo	eth1	eth0
Network Load	215 bytes/s	0 bytes/s	61,138 bytes/s
Relative Network Load	0.00 %	-0.00 %	0.49 %
- Process Monitoring Table:**

Process	CPU	Memory	Starts	Stops	Status	Tine Status
UDPPING	0 %	2.12 MB	0	0	Green	(no monitoring link configured)
ENS	0 %	20.82 MB	0	0	Green	success
GLOBALSFEC	0 %	17.02 MB	0	0	Green	(no monitoring link configured)
TIMSERV	0 %	13.12 MB	0	0	Green	(no monitoring link configured)
GENS	0 %	108.32 MB	1	0	Green	(no monitoring link configured)
- Process: ENS:**
 - CPU Violations: 0, Last Start Retry: 17:00:34 24. May, Last TINE Response: 17:54:49 24. May
 - Memory Violations: 0, Current Retry: 0, Last TINE Retry: 17:00:40 24. May
 - Buttons: Start, Stop, Restart, Start Polling, Stop Polling
- Configuration Table:**

Setting	Value	Setting	Value
Alias	ENS	Pause N Seconds After Start	1 s
Process Name	ens	Number of Retries	5
Is Service	false	Retry Interval	10 s
Path	/export/tine/server/ens/bin/ens	Autostart	YES
Startup Parameters		Max CPU Load	90 %
Match Parameters	true	No. of Allowed CPU Violations	5
Match Path	true	Max Memory	1000.0 MB
Working Directory	/export/tine/server/ens/bin	No. of Allowed Memory Violations	3
Console Caption		TINE Property	/SITE/ENS1/#0/NSERVERS
Preceding Processes		Polling Rate	1000 ms
Environment Variables		Timeout	10 s
Monitor N Seconds After Start	5 s	Timeout Restart	20 s

TINE Watchdog Configurator



TINE Watchdog Configurator

Watchdog Server Configuration Wizard

Configure the processes to run on this host

LXUNITFEC	Process ID (FEC):	LXUNITFEC	Pause After Previous [sec]:	1
FECSIM.MSTR	Alias:	LXUNITFEC	Pause After Start [sec]:	5
CYCFEC.TST	Process Name:	unitserv	Number of Retries:	5
ENS	Windows Service?:	<input type="checkbox"/>	Retry Interval:	10
GENS	Path:	/export/tine/server/unit/bin/unitserv	Auto Start:	Yes
TSTMARCH	Match Path?	<input checked="" type="checkbox"/>	Max CPU Load [%]:	50
TSTHISTORY	Parameters:	/f=LXUNITFEC /s=LxUnitServer	Allowed CPU Violations:	5
TSTPMARCH	Match Parameters?	<input type="checkbox"/>	Max Memory [MB]:	1000
MSTSIM	Working Directory:	/export/tine/server/unit/bin	Allowed Memory Violations:	5
TSTCASFEC	Environment Variables:	TINE_HOME=/etc/tine;	Polling Rate [ms]	1000
TSTALMSTATEFEC	Preceding Processes:		Timeout [sec]	10
TSTSTATEFEC	Process Caption:	<cmd line>	Restart Timeout [sec]	0
TSTGLBSRV	Description:			
LXUNITFEC	TINE Property to Monitor:			
FECSIM.MSTR				
CYCFEC.TST				
ENS				
GENS				
TSTMARCH				
TSTHISTORY				
TSTPMARCH				

Buttons: Add, Remove, OK, Cancel, Default, < Back, Next >, Finish, Exit

TINE Watchdog Configurator

The screenshot displays the TINE Watchdog Configurator interface, which is a wizard for configuring watchdog processes. The main window is titled "Configuration Wizard" and features a green header with the text "Wa" and "nfiguration Wizard". Below the header, there is a section titled "to run on this host".

The "New Process" dialog box is open, showing the "Process ID:" field set to "JSineServer". The "Available Processes:" list includes: WinSineServer, JSineServer, DMN_MCSW7DUVAL02, PE_TEST, Bunche_L2, PYSineServer, VbSineServer, PE_TEST, Calendar, and SineVS15. The "JSineServer" process is selected. The dialog has "OK" and "Cancel" buttons.

The "Select property from TEST/JSineServer" dialog box is also open, showing the "Device:" field set to "SineGen0". The "Property:" list includes: BoolArray, BoolTest, ByteArray, ByteTest, CurrentSetting, FltFltTest, FltIntTest, Frequency, FunkyInfo, ImageTest, IntFltIntTest, IntIntInc, LONGSTATUS, LolaImageTest, NAME64TEST, and Name32IntTest. The "ByteArray" property is selected. The dialog has "OK" and "Cancel" buttons.

The main configuration wizard has several fields and checkboxes:

- Path: desy.tine.example.sine.SineDeviceServer
- Match Path?
- Parameters: [empty field]
- Match Parameters?
- Working Directory: sers\duval\workspace\TINE-Sine-Example
- Environment Variables: [empty field]
- Preceding Processes: [empty field]
- Process Caption: <cmd line>
- Description: [empty field]
- TINE Property to Monitor: [empty field]

Additional fields on the right side of the wizard include:

- Pause After Previous: [empty field]
- Pause After Start [s]: [empty field]
- Number of Retries: [empty field]
- Retry Interval: [empty field]
- Auto Start: [empty field]
- Max CPU Load [%]: [empty field]
- Allowed CPU Violation: [empty field]
- Max Memory [MB]: [empty field]
- Allowed Memory Violation: [empty field]
- Polling Rate [ms]: [empty field]
- Timeout [sec]: 10
- Restart Timeout [sec]: 0

At the bottom of the wizard, there are buttons for "Add", "Remove", "Default", "< Back", "Next >", "Finish", and "Exit".

Two red arrows are present: one pointing from the "Add" button to the "New Process" dialog, and another pointing from the "TINE Property to Monitor" field to the "Select property from TEST/JSineServer" dialog.

TINE Studio Apps ...

- CAM + Console Daemon
 - ‘approved’ by ‘the coordinators’
 - final testing phase ...
- ‘jaka web start’
 - (Needs a proper name: how about ‘java alternative web start’ JAWS?, cosystart ?)
 - Reads the current set of .jnlp files and ‘compares and caches’ target libs and files and launches target application
 - ‘just like’ java web start except
 - No ‘signing’ necessary
 - No ‘did you flush your cache?’
 - No surprises from Oracle in the next release