Advantest FlexNet Embedded license server tools

Advantest FlexNet Embedded (FNE) license server tools are used to manage license servers, including registering and synchronizing license servers with the Advantest License Back-office, resetting the license server database, and displaying license server configurations and log files.

Advantest FlexNet Embedded license server tools usage

The following table lists the available Advantest FlexNet Embedded (FNE) license server tools and their usage:

Advantest FlexNet Embedded license server tools

Option	Description	
`reset-fne-server`	Resets the license server database. The license server is shutdown and requires restarting.	
	Location:	/opt/flexnetls/socbu/

Option	Description

Options:	`-force`
	`-rules`
	`-all`
	`-help`

Usage:	Requires root access. **`Without option`**: empties the license database on the FlexNet Embedded license server. A reset is also required to synchronize the FlexNet Embedded license server with the Advantest License back-office (online or offline). -**`force`** deletes the license database on the FlexNet Embedded license server. -**`rules`** deletes rules on the FlexNet Embedded license server. -**`all`** includes -force and -rules and remove backup configuration

Examples:	`reset-fne-server -force`
	
	`Successfully removed FNE database`
	
	`reset-fne-server`
	
	`12:44:24,141 INFO Starting FlexNet License Server 2017.11 (build 215319)`
	`12:44:24,143 INFO Copyright (C) 2013-2017 Flexera Software LLC.`
	`12:44:24,143 INFO All Rights Reserved.`
	`12:44:24,143 INFO Running as a console session`
	`12:44:29,917 DEBUG Native code loaded in 266ms.`
	`12:44:30,350 INFO Removed "/var/usr/local/bin/flexnetls_licenses.ks"`
	`12:44:30,351 INFO Removed "/var/usr/local/bin/flexnetls_licenses.mv.db"`
	`12:44:30,352 INFO Stopping FlexNet License Server`

Option	Description	
`register-fne-server`	Registers the license server at Advantest License Back-office.	
	Location:	/usr/local/bin/
	Options:	*`nnnnn-ffff`* and *`binary response file`*
	Usage:	Used to initialize a new FlexNet Embedded license server. If the FlexNet Embedded license server has access to the internet, it will automatic synchronize with Advantest License back-office and the FlexNet Embedded license server is automatically registered. If the FlexNet Embedded license server is not connected to the internet, the synchronization must be carried out by up and down loading files. The `LIC-SRV-Registraion_nnnn-ffff` string is a unique key used to identify the FlexNet Embedded license server. It is displayed in the Advantest License Portal under Setup Server.

	Examples:	**Online**:
		`register-fne-server 000601-ffff`
		
		`Successfully activated your server to ADVANTES`
		
		Offline:
		
		The **`register-fne-server 000601-ffff`** command creates a file to be uploaded using the Advantest License Portal to complete the registration.

`fne-proxy-setup`	Configures the FNP component of a proxy failover setup. Run the `fne-proxy-setup` tool after fne-failover setup.	
	Location:	/opt/flexlm/bin
	Usage:	**`fne-proxy-setup <secondary host> <tertiary host>`** Use fully qualified host names. This tool uses ssh and sudo. You might be asked to enter your password several times.

Option	Description		
`sync-fne-server` **(for online use)**	Synchronizes the license server with Advantest License Back-office.		
	Location:	/usr/local/bin/	
	Usage:	Used for FlexNet Embedded license servers connected to the internet to force a synchronization with Advantest License back-office for automatic license updates. > Note: FlexNet Embedded license servers connected to the internet automatically **synchronize with the Advantest FlexNet License Back-Office every 12 hours.**	
`fne-get-config`	Displays the configuration items from the local FNE server.		
	Location:	/opt/flexnetls/socbu/	
	Options:	`--i[nstance]`	Displays the value from the specified instance.
		`--p[arent]`	Displays the factory default value of the specified key.

		`--s[howconfig]`	Displays the complete configuration, listing the keys and their values. Examples of a key:-value pair displayed include:
			`logging.threshold: LICENSING`
			`fne.syncTo.enabled: false`
			`lfs.syncTo.pagesize: 50`
			Configuration queries can also be limited by specifying a key.

Option	Description	
`--h[ostid]`	Displays the host ID of the license server	

`--1`	Displays information for instance 1, listing the keys and their values.
	Examples of key:-value pairs displayed include:
	`id 1`
	`serverInstanceId MYFIRSTLICSVR`
	`requestId 1`
	`enterpriseId 12345678`
	`pendingDeletion false`
	`...`
	
	Instances queries can also be limited by specifying a key.	

`--t[rusted-storage]`	Shows whether the license database (trusted storage) is consistent or not. Returns `true` or `false`. `false` response: the server is running but not able to serve licenses.	
`--d[etails]`	Displays the company details (company name).	
`--m[achine]=host`	Directs requests to the specified computer.	
`--b[uild]`	Displays detailed information of the server build versions.	
`--help`	Displays the help text.	
`--v[ersion]`	Displays the version number of the `fne-get-config` tool.	
Usage:	**`fne-get-config [option] <key>`**	

Examples:	Display the value of a key, for example, the logging threshold value (`LICENSING`):
	
	`fne-get-config logging.threshold`
	
	`LICENSING`	

Option	Description	

Show your company details:	`fne-get-config -d`
	
	`ADVANTEST_RD`	

Show the host ID of the license server:	`fne-get-config -h`
	
	`5543053D6573`	

Show the host ID of the specified license server:	`fne-get-config -m=fne_ls_1 -h`
	
	`006046B1FD09`	

Show the host ID of the specified license server:	`fne-get-config -m=fne_ls_1 -h`
	
	`006046B1FD09`	

`fne-status`	Location:	`/usr/bin/fne-status` or `/usr/local/bin/fne-status`

Option	Description
Usage:	If the FNE/FNX license server is running, the command returns a confirmation message. This tool give a compressive overview installed server, service and status and can be used to locate a root cause for a not function server.

Option	Description

Examples:	**Installed components:**
	`advantest-fne-server-2024.05.0.0-19140.el9`
	`advantest-fne-server-viewer-2.2-19140.el9`
	`advantest-fne-proxy-2024.04.0.0-19140.el9`
	`advantest-fne-proxy-base-2024.04.0.0-19140.el9`
	`v93000-fne-client-2024.04.0.0-19140.el9`
	`advantest-test_license_checkout-1.0-19140.el9`
	Service status:
	`* advantest-fne-server.service - Flex Net Embedded license server adapted for Advantest`
	`Active: active (running) since Mon 2024-05-20 11:08:14 CEST; 3 days ago`
	`* advantest-fne-server-viewer.service - Advantest Flex Net Embedded License Server Viewer`
	`Active: active (running) since Mon 2024-05-20 11:06:48 CEST; 3 days ago`
	`* advantest-fne-proxy.service - Advantest FNP2FNE proxy`
	`Active: active (running) since Mon 2024-05-20 11:07:36 CEST; 3 days ago`
	FNE server status:
	`ONLINE connection to license.advantest.com:443 available`
	`Server is registered to ADVANTEST_RD`
	`Total number of features : 379`
	`Failover role: MAIN`
	`Main : advvm123.mycom.net`
	`alive`
	`Backup: advvm124.mycom.net`
	`alive, currently unused`
	FNP server status:

Option	Description		
`fne-handle-response`	Checks the validity of the response file, and uploads, and downloads the response file to and from FNE server.		
	Location:	`/usr/local/bin/fne-handle-response`	
	Options:	`--upload`	Uploads the response file to the local FNE license server.
		`--download`	Downloads and saves the response file to the specified file for offline processing by the back-office server.
		`--show`	Displays the content of the response file.
		`--notitle`	Omits the title line in the listing (for scripting).
		`--ids`	Displays additional information, such as host IDs.
		`--help`	Displays the help text.
		`--v[ersion]`	Displays the version number of the `fne-handle-response` tool.
	Usage:	**`fne-handle-response -show|upload|-download [options] <response.bin>`**	

	Examples:	Upload a response file:	`fne-handle-response --upload responsefile-2024-09-19_20-09-response.bin`
			
			`Successfully applied`

Option	Description	

Download a response file to file confirm.bin:	`fne-handle-response --download confirm.bin`
	
	`Successfully wrote confirm.bin`	

Display a response file:	`fne-handle-response --show responsefile-2024-09-19_20-09-response.bin`
	
	`Name/Version x Count Start->Expires Conditions`
	`BitFailMap_HSM/1.0 x 1 14-sep-2024->21-sep-2024`
	`BitFailMap_SOC/1.0 x 1 14-sep-2024->21-sep-2024`
	`Company_Details/1.0 x 1000 7-dec-2021-> Company=Advantest_Training,Ent`
	`E8015_A3-Model_upgrade/1.0 x 1 14-sep-2024->21-sep-2024 %%SERIALNUMBER`
	`MemoryTestPlusOffline_HSM/1.0 x 1 14-sep-2024->21-sep-2024`
	`...`	

`showlog-fne-server`	Displays the license server log file.	
	Location	`/opt/flexnetls/socbu/`
	Options	Log level `1…8` Logfile <show specific logfile> `-f` - (follow) Show only the last 20 entries of the log file and "follow" any new entries

Option	Description
Usage	Log Levels: 1 FATAL 2 ERROR 3 WARN 4 INFO 5 LICENSING 6 DEBUG 7 POLICY 8 TRACE

Option	Description
Examples	showlog-fne-server -5 2019-12-17 02:56:39,734 LICENSING Scheduled-poo1-3-thread-8 [elapsed:816] Outgoing Feature request completed showlog-fne-server -6 2019-12-17 03:00:37,742 DEBUG Scheduled-pool-3-thread-10 Server native hostids: ETHERNET 00202072558D3 ETHERNET E85035522E69 2019-12-17 03:02:38,661 DEBUG Scheduled-pool-3-thread-9 Server native hostids: ETHERNET 00202072558D3 ETHERNET E85035522E69 2019-12-17 00:04:39,560 DEBUG Scheduled-pool-3-thread-11 Server native hostids: ETHERNET 00202072558D3 ETHERNET E85035522E69 2019-12-17 00:06:40,469 DEBUG Scheduled-pool-3-thread-7 Server native hostids: ETHERNET 00202072558D3 ETHERNET E85035522E69 2019-12-17 00:08:41,378 DEBUG Scheduled-pool-3-thread-7 Server native hostids: ETHERNET 00202072558D3 ETHERNET E85035522E69 2019-12-17 00:10:42,297 DEBUG Scheduled-pool-3-thread-3 Server native hostids: ETHERNET 00202072558D3 ETHERNET E85035522E69 2019-12-17 00:12:43,196 DEBUG Scheduled-pool-3-thread-7 Server native hostids: ETHERNET 00202072558D3 ETHERNET E85035522E69 2019-12-17 00:14:44,105 DEBUG Scheduled-pool-3-threed-7 Server native hostids: ETHERNET 00202072558D3 ETHERNET E85035522E69 2019-12-17 00:16:45,014 DEBUG Scheduled-pool-3-thread-11 Server native hostids: ETHERNET 00202072558D3 ETHERNET

Option	Description		
`test_license_checkout`	Tests the license checkout from a license server.		
	Prerequisite	The FNE client software must be installed on the FNE server workstation.	

	Location	**RHEL 9**
		`/usr/bin/`
		RHEL 7
		`/usr/bin/` which links to `/usr/local/bin/`
		No path naming is required as path is included in PATH environment variable.	

	Syntax:	**`test_license_checkout -t <time in sec.> -f <feature name>`**	
	Options:	`-t <time>`	Specifies the time in seconds to be waited before checking in the license again. Default period is 10 seconds.

		`-f [count] <feature[/version]>`	Specifies the license feature to be used for the license checkout test.
			This option can be applied multiple times.
			Default is dummy. Version defaults to 1.0. For example:
			`Using FlexNetEmbedded 2023.09.1.292127 / subsystem 1.3 / built Feb 8 2024 16:00:57 (RPM)`
			`Check out finished in 46ms for category tplf`
			`OK 1 x dummy/1.0`
			`Sleep for 0 seconds...`

Option	Description	
`-d`	Shows all debug/info messages (default: Only FATAL/ERROR) To display all available information, use `SOCBU_DIAGNOSTICS=7`.	
`-p <proj>`	Sets project information.	
`-v <ssn>`	Sets system serial number to <ssn>.	
`-o`	Activates the `isLicensingOk()` thread, calling it every 20 seconds and creating the result output.	
`-l [<file>]`	Replays the log file created by using SOCBU_LOG_REQUEST_FILE .	
`-u <name>`	Sets the name of the upstream or device owner.	
`-c <name>`	Sets device category (must follow a `-u` entry).	
`-e <ext>`	Sets the hostid extension.	
`-m`	Shows customer details provided by license server.	
`-g`	Set feature checkout category; tool or tplf (default).	
`--help`	Displays the help text.	
Examples:	To check that the FNE server is working after registration, enter:	**`test_license_checkout`** The tool attempts to checkout the dummy license from the FNE server, which is available after successful FNE server registration.

Option	Description
Tests the license checkout for the Digital_E803x_100_200Mbps feature with count 1 (default count). After 60 seconds, the license is checked in.	**test_license_checkout -t 60 -f Digital_E803x_100_200Mbps**
To check out the online SmarTest_SOC license with date version 2024.06 and system serial number DE04600001, enter the following command. If the checkout succeeds, the license is checked out for 15 seconds. If it fails, it is not checked out. Date version is the master release date of the SmarTest version in use, documented in the SmarTest release notes.	**test_license_checkout -f SmarTest_SOC/2024.06 -v DE04600001 -t 15**

To check out a specified number of Digital_E8012_TIA floating licenses, enter the following command.
Three Digital_E8012_TIA floating licenses are checked out for the duration of 10 seconds.
	test_license_checkout -f 3 Digital_E8012_TIA -t 10
	
	Example output:
	
	`Using FlexNetEmbedded 2021.05.0.279614 / subsystem 1.3 / built Nov 8 2021 15:34:51 (RPM)`
	
	`Check out finished in 25ms for category tplf`
	`OK 1 x S&S_Tools_Package/1.0`
	`Sleep for 0 seconds...`

Option	Description
To check out S&S licenses, enter a command of the following form. Use quotes to correctly specify special characters such as the `&` sign.	**`test_license_checkout -f "S&S_Tools_Package" -t 0`**
To check out a license with a device owner (only available for FNE client or on the FNE license server), enter a command of the following form. The example requires a test program locked to the device owner ADVANTEST_RD. The token is Token_ADVANTEST_RD_WaferSort. The name of the device owner is set using the `-u` option.	**`test_license_checkout -u ADVANTEST_RD -f Token_ADVANTEST_RD_WaferSort -t 0`**
The SOCBU_DIAGNOSTICS debug option is used to get more data and create an output file. If the checkout fails, please rerun the command with diagnostics enabled, enter the following command.	Example for S&S licenses: **`SOCBU_DIAGNOSTICS=7 test_license_checkout -f "S&S_Tools_Package" -t 0 > /tmp/lic-error.txt`** Alternatively, the `-d` option can be used instead of SOCBU_DIAGNOSTICS: `test_license_checkout -f SmarTest_SOC/2024.05 -v MY04605099 -t 0 -d > /tmp/lic-error.txt`

Option	Description		
`fne-rules`	Manages the FNE pooling rules. (Imported in FNE 2024.10). Run the `fne-proxy-setup` tool after fne-failover setup.		
	Location:	/opt/flexnetls/socbu/	
	Options:	`--upload [<model>]`	Uploads the model definition to the local FNE license server. If the model is not specified, stdin is used. The model is located at: /var/opt/flexnetls/socbu/model.current It is applied automatically after a reset of the database.
		`--show`	Show current model definition
		`--delete`	Deletes the model definition.
		`--help`	Displays the `fne-rules` tool help text.
		`--version`	Displays the version number of the `fne-rules` tool.
	Usage:	**`fne-rules -show|delete|-upload [<model>]`**	
`fne-log-collect`	Collects all relevant log file information from the FNX server for a given time. (Imported in FNE 2024.10). Run the `fne-proxy-setup` tool after fne-failover setup.		
	Location:	/opt/flexnetls/socbu/	
	Options:	`--r[ange]`	Length of the interval in hours before and after the given time to be collected. Default: 4 hrs.
		`--d[ay]`	Day of incident. Format: `[[%Y-]%m]%d` Default: today/yesterday

Option	Description
`--t[ime]`	Time of incident. Format: `%H[:%M[:%S]]`
`--p[rogress]`	Displays progress information.
`--o[nly]`	Check only one process: fne/proxy/access/viewer
`--c[eckPerformance]`	Analyze the log file and present statistics on the server load.
`--h[elp]`	Displays the `fne-log-collect` tool help text.
`--v[ersion]`	Displays the version number of the `fne-log-collect` tool.
Usage:	**`fne-log-collect -t <time> [options]`**

Examples	Collect logs from 3 a.m. today/yesterday:
	`fne-log-collect -t 3`
	Collect logs from 2 p.m. to 4 p.m. on 1st April:
	`fne-log-collect -t 15 -d 04-01 -r 1`
	Collect the logs for the whole of 1st April:
	`fne-log-collect -t 12 -d 04-01 -r 12`
	Collect a short snapshot for the precise time of the FNP2FNE-proxy:
	`fne-log-collect -t 09:10:11 -d 2022-04-01 -r 1 -o proxy`

Revision #1
Created 2025-10-15 09:59:15 CEST by Ekaterina Nikitina
Updated 2025-10-15 09:59:16 CEST by Ekaterina Nikitina