

CSTA V2.7.1

Software locks (Licenses)

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Introduction

CSTA allows a third party application to monitor and/or control the behavior of telephony objects handled by the OmniPCX Enterprise.

Third party applications can be:

- a PC based telephony application,
- an outbound Campaign Manager,
- a call router,
- an Interactive Voice Response (IVR) system,
- a voice logger...

Telephony objects that can be monitored/controlled include:

- business sets,
- ACD V1 agents or CCD agents,
- CCD pilots,
- virtual sets,
- IVR ports (analogues or digitals), i.e. ports declared as such by management.

CSTA is licensed:

- on a per node basis,
- per monitoring request on an object (so called device).

Each given node has a 'CSTA profile" and the two available profiles as follows:

- Business: requested to monitor/control analogue, digital or virtual sets,
- Call Centre: requested as soon as you need to monitor ACD V1 agents or CCD agents.

Two telephony object types are managed separately:

- CCD pilots,
- and IVR ports.

In this document, ACTIS is designed as the OmniPCX Enterprise technical order preparation system. This Alcatel software is in charge, among other things, to take into account the OmniPCX Enterprise software licenses in terms of customer needs.

What's new ?

- update of the maximum value for both CSTA profiles (Business and Call Centre) - pages 3 and 4
- update of the maximum value for IVR ports - page 5
- addition of new Alcatel CTI applications - page 9
- addition of the TSAPI Premium Server application which will replace the TSAPI Server product; update of ACTIS limits - page 10
- CSTA licenses are now bundled in CCagent licenses; update of ACTIS limits - page 10
- update of Alcatel 4980 licenses and ACTIS limits - page 11
- CSTA licenses are now bundled in TAPI Premium Server licenses; update of ACTIS limits - page 12
- following new products and licenses are now available: CCoutbound, CCweb, CCemail, CCinternet, CCfax - pages 13, 14 and 15
- update of the CSTA/TSAPI licensing - page 17
- addition of the Remote B channels recording license for the NICE voice logger

CSTA Licences**2.1 CSTA monitoring Business profile**

The Business profile is limited to business devices including virtual sets.

The Business software license is thus required to monitor/control these devices.

From the ACTIS point of view:

Lock number	Designation	Value	Default value	Orderable Items (OI) references
100	CSTA Profile	1 (Business)	0	3BA09247
101	CSTA Quantity of monitoring requests	0 to 5000 (pack of 5)	0	0 to 5 : free 5 to 50 : 3BA09248 50 to 5000 : 3BA09165

2.2 CSTA monitoring Call Centre profile

The Call Centre profile implements all services and events for all kind of objects. It is a superset of the Business profile.

The Call Centre software license is thus required to monitor/control business devices, virtual sets, ACD V1 agents or CCD agents.

From the ACTIS point of view:

Lock number	Designation	Value	Default value	Orderable Items (OI) references
100	CSTA Profile	2 (Call Centre)	0	3BA09246 Upgrade kit from CSTA Profile value 1 to 2 : 3BA09246
101	CSTA Quantity of monitoring requests	0 to 5000 (pack of 5)	0	0 to 5 : free 5 to 50 : 3BA09248 50 to 5000 : 3BA09165

2.3 CCD pilot monitoring

CCD pilot monitoring is now priced functionally. A license allows an application to monitor any number of pilots, thus avoiding the painful exercise of guessing the number of pilots the customer will use (nevertheless, the quantity of monitoring requests is limited to 800).

For system migration to OmniPCX Enterprise release 3.x/4.x, CCD pilot monitoring is automatically set when CSTA monitoring requests with Call Centre “CSTA profile” were configured.

From the ACTIS point of view:

Lock number	Designation	Value	Default value	Orderable Items (OI) references
113	CSTA Pilots CCD monitored	1	0	3BA09249

2.4 IVR ports

IVR ports included in CCD IVR groups or Interactive queueing groups are not charged as agents but require CSTA monitoring.

A license has thus been created for IVR ports and grants the monitoring/control of IVR ports regardless of the node monitoring profile. It may apply to both business and call centre environments.

From the ACTIS point of view:

Lock number	Designation	Value	Default value	Orderable Items (OI) references
123	CSTA IVR port monitored	0 to 500 (pack of 5)	0	0 to 5 : 3BA09250 5 to 30 : 3BA09251 30 to 500 : 3BA09252

Monitoring of an IVR port is depending on:

- the interface type: digital (IVR_Z30 board declared as such by management) or analogue
- the checking of the Z-IVR characteristic for each port (IVR Port characteristic in Users declared as such by management)
- the fact that IVR ports are included in CCD IVR groups or not (ACD Station set to Ivr in Users declared as such by management)
- the identification of the CSTA client connected.

The following table indicates if the IVR port software license is mandatory or not to declare an IVR port:

	Analogue interface	Digital interface
Business IVR port (that is not in a CCD IVR group)	CSTA IVR port monitored mandatory if the <i>IVR port</i> characteristic has been set, no software license otherwise	CSTA IVR port monitored mandatory (<i>IVR port</i> characteristic forced by management)
CCD IVR port (that is in a CCD IVR group)	CSTA IVR port monitored mandatory (<i>IVR port</i> characteristic forced by management)	CSTA IVR port monitored mandatory (<i>IVR port</i> characteristic forced by management)

The following table summarises the software licenses necessary to monitor an IVR port:

Client type is Alcatel CCivr or client type is a generic IVR identified as such by CSTA (direct connection or behind the TSAPI server link)		
	Analogue interface	Digital interface
Business IVR port (that is not in a CCD IVR group)	CSTA IVR port monitored if declared as IVR port, CSTA business licence otherwise	CSTA IVR port monitored
CCD IVR port (that is in a CCD IVR group)	CSTA IVR port monitored	CSTA IVR port monitored
Client type is an IVR not identified by CSTA (e.g. behind EasyPhone, Genesys, CT-Connect, TSAPI, ...)		
	Analogue interface	Digital interface
Business IVR port (that is not in a CCD IVR group)	CSTA business licence +CSTA IVR port monitored if declared as IVR port otherwise CSTA business licence only	CSTA IVR port monitored and CSTA business licence
CCD IVR port (that is in a CCD IVR group)	CSTA IVR port monitored and CSTA Call Centre licence	CSTA IVR port monitored and CSTA Call Centre licence

Determining the number of CSTA monitoring requests

3.1 General considerations

The control of any object/device requires prior monitoring.

If several applications are monitoring simultaneously the same device, customers will have to buy as many monitoring requests. This is not the case if device monitoring multiplexing is provided by a CTI platform such as the Alcatel TSAPI server, CT-Connect, Genesys...

3.1.1 Monitoring both the agent and its associated set

Some CTI applications may need to monitor simultaneously the agent phone set and its physically associated set (also called pro-ACD). The two most frequent situations of that kind identified so far are:

- the monitoring of all CCD declared physical sets may be used by a CTI application to detect that an agent is logging on through his telephone set;
- a voice logger may use the monitoring of CCD declared physical sets to handle the association between a physical set and the agent using it.

In these cases, customers have to pay for two monitoring requests.

A CSTA service allowing reception of logging status of CCD agents without the requirement of monitoring the agents is available. It provides a CTI application with a mean for dynamically starting and stopping the monitoring on CCD agents.

An Escape Service will be generated when an agent logs on/off. It will contain the agent's action (logon or logoff), the agent's device, the pro-ACD device and the agent's name.

To access this service, the application has to register to the switch using the CSTA private service Escape Register Request.

3.1.2 Using virtual sets

These sets are mainly used to perform either call routing or outbound calls in predictive mode.

Such extensions have to be integrated in the overall needs for OmniPCX Enterprise resources and CSTA monitoring.

Alcatel CTI applications**4.1 Introduction**

Alcatel offers following CTI applications:

- Alcatel TSAPI Server/TSAPI Premium Server: provide TSAPI to client applications
- Alcatel CCagent: provides a telephony application and a desktop toolkit for CCx agents
- Alcatel 4980: provides a fully featured PC based application for business environments
- Alcatel CCivr: designed for the development of customer specific voice applications
- Alcatel TAPI Premium Server : provides TAPI to client applications
- Alcatel CCoutbound : provides outbound campaign management functionalities in a Call Centre environment
- Alcatel CCemail : provides e-mail functionalities in a Call Centre environment
- Alcatel CCweb : provides Web functionalities in a Call Centre environment
- Alcatel CCfax : provides fax functionalities in a Call Centre environment.

4.2 Alcatel TSAPI Server/TSAPI Premium Server

The TSAPI run-time package is licensed by monitored devices.

CSTA monitoring requests induced by TSAPI have to be purchased separately. However, because Alcatel TSAPI Server/TSAPI Premium Server support monitoring multiplexing (i.e. an application issuing several monitoring requests for the same device behind the TSAPI server will only require one CSTA monitoring request), CSTA monitoring requests generated by a TSAPI application have to be computed per monitored devices (and not per monitoring requests).

From the ACTIS point of view:

Lock number	Designation	Value	Default value	Orderable Items (OI) references
114	TSAPI Request monitored	0 to 2000 (pack of 5)	0	0 to 5 : 3BA09253 5 to 50 : 3BA09254 50 to 2000 : 3BA09255

4.3 Alcatel CCagent

Alcatel CCagent is licensed by logged-in agents and is a client application requiring the Alcatel CCagent server.

The use of CSTA by CCagent is bundled in CCagent licenses, that is CSTA licenses are no more required.

From the ACTIS point of view:

Lock number	Designation	Value	Default value	Orderable Items (OI) references
115	CCA Quantity of agents	0 to 1000 (pack of 5)	0	0 to 5 : 3BA09256 5 to 1000 : 3BA09257
157	CCA Nomadic	1	0	no OI reference

Note: lock 157 is free and is set if optional Nomadic function is requested in the CCA application

4.4 Alcatel 4980

This desktop application for a business environment is proposed in three versions:

- 4980 Standard
- 4980 Groupware
- 4980 Advanced.

These packages are licensed by declared users.

The use of CSTA by A4980 is bundled in A4980 licenses, that is CSTA licenses are not required.

From the ACTIS point of view :

Lock number	Designation	Value	Default value	Orderable Items (OI) references
116	4980 Standard	0 to 2500 (pack of 10)	5	0 to 10 : 3BA09259 10 to 500 : 3BA09260 500 to 2500 : 3BA09292
117	4980 Advanced	0 to 2500 (pack of 10)	5	0 to 10 : 3BA09261 10 to 500 : 3BA09262 500 to 2500 : 3BA09294
129	4980 Groupware	0 to 2500 (pack of 10)	5	0 to 10 : 3BA09283 10 to 500 : 3BA09284 500 to 2500 : 3BA09293
119	4980 Nomadic – Quantity of agents logged	0 to 2500 (pack of 10)	0	no OI reference

Notes:

- Lock 119 is free and is set if Nomadic function has been requested in the application; this lock is only available if Advanced licences have been purchased
- 5 free demonstration licenses are automatically set (if not disabled in ACTIS) for the three locks Standard, Groupware and Advanced.

4.5 Alcatel CCivr

The CCivr connects to the OmniPCX Enterprise through the Alcatel TSAPI Server.

Alcatel TSAPI Server licences are not required but CSTA Business, CSTA Call Centre or IVR ports licences have to be purchased (see the chapter 2 for more information).

4.6 Alcatel TAPI Premium Server

The TAPI Premium Server package is licensed by monitored devices.

The use of CSTA by TAPI Premium Server is bundled in TAPI Premium Server licenses, that is CSTA licenses are no more required.

From the ACTIS point of view:

Lock number	Designation	Value	Default value	Orderable Items (OI) references
143	TAPI Premium Server	0 to 5000 (pack of 5)	0	0 to 5 : 3BA09300 5 to 50 : 3BA09301 50 to 5000 : 3BA09302

4.7 Alcatel CCountbound

CCountbound (CCO) is a server based on mechanisms developed by Genesys for sampling calls.

The use of CSTA by CCO is bundled in CCO licenses, that is CSTA licenses are not required.

From the ACTIS point of view:

Lock number	Designation	Value	Default value	Orderable Items (OI) references
161	CCO agents	0 to 1000 (pack of 5)	0	0 to 5 : 3BA09352 5 to 1000 : 3BA09353
162	CCO Voice Activity Detection	0 to 1000 (pack of 5)	0	0 to 5 : 3BA09355 5 to 1000 : 3BA09356

4.8 Alcatel CCemail

CCemail (CCE) allows dealing with e-mails in the same way as telephonic calls presented in a Call Centre. This application is only available from OmniPCX Enterprise release 4.1.1.

The use of CSTA by CCE is bundled in CCE licenses, that is CSTA licenses are not required.

From the ACTIS point of view:

Lock number	Designation	Value	Default value	Orderable Items (OI) references
160	CCemail agents	0 to 1000 (pack of 5)	0	0 to 5 : 3BA09349 5 to 1000 : 3BA09350

4.9 Alcatel CCweb

CCweb (CCW) enables requests from customers using Internet to communicate with a Call Centre to be processed. This application is only available from OmniPCX Enterprise release 4.1.1.

The use of CSTA by CCW is bundled in CCW licenses, that is CSTA licenses are not required.

From the ACTIS point of view:

Lock number	Designation	Value	Default value	Orderable Items (OI) references
125	CCweb agents	0 to 1000 (pack of 5)	0	0 to 5 : 3BA09280 5 to 1000 : 3BA09281

4.10 Alcatel CCinternet

To reduce costs, a CCinternet (CCI) license is available at a reduced price. This license is composed with a CCemail licence (see section 4.8) and a CCweb licence (see section 4.9) and is only available from OmniPCX Enterprise release 4.1.1.

The use of CSTA by CCI is bundled in CCI licenses, that is CSTA licenses are not required.

From the ACTIS point of view:

Lock number	Designation	Value	Default value	Orderable Items (OI) references
125 160 (*)	CCinternet	always 0 (pack of 5)	0	5 to 10 : 3BA09361 10 to 1000 : 3BA09362

Notes:

there is no specific lock number associated to the CCinternet package (CCI is composed with CCweb and CCemail locks);

ACTIS automatically configures as many CCinternet licences as common quantities of CCweb agents and CCemail agents are declared.

Example: if CCweb agents = 10 and CCemail agents = 20, following licenses will be generated:

10 CCinternet (3BA09361 and 3BA09362)

10 CCemail (3BA09349 and 3BA09350)

4.11 Alcatel CCfax

CCfax (CCF) enables faxes to be received, transformed into e-mails, and diverted to the CCemail mailbox to be distributed to the agents. CCfax is not available without the CCemail application and is then only available from OmniPCX Enterprise release 4.1.1.

CSTA licenses are not required for this application.

Other CTI applications**5.1 Introduction**

This chapter relates to software licenses induced by other CTI applications like voice loggers.

5.2 NICE voice logger

Using a CSTA-based integration to get some call parameters (like the agent identifier, the agent name, business data...) requires to monitor the business device or the CCD agent involved in the call. The monitoring of agents or business extensions provides then additional indexing and allows selective recording. Call parameters CSTA information can be provided:

- directly from the OmniPCX Enterprise to the voice logger with additional CSTA licences;
- using a CTI server and the voice logger API, reusing CTI server licences.

If the voice logger is physically connected on trunk side or on telephone extensions side, all devices to be recorded should be monitored. In this case, CSTA and TSAPI licenses are required as follow:

Version of NICE CLSapplication	Business profile	Call Centre profile
= 8.1	1 CSTA Business license permonitored device	1 CSTA Call Centre license permonitored device (agent andpro-ACD if needed)
>= 8.5	1 CSTA Business license and1 TSAPI license per monitoreddevice	1 CSTA Call Centre licenseand 1 TSAPI license per moni□tored device (agent and pro-ACD if needed)

If the voice logger is using the dedicated recording link (that is by using PCM2 boards), there are specific CSTA licenses to control the DR-link channels.

The number of required licenses is equal to the number of simultaneous recording channels used. In this case, the use of CSTA by NICE is bundled in these licenses, that is CSTA licenses (business and Call Centre) are not required.

Note: if DR-link channels are used, only **2000** devices can be monitored.

From the ACTIS point of view:

Lock number	Designation	Value	Default value	Orderable Items (OI) references
130	CSTA NICE Recording	1	0	3BA09289
145	B channels recording	0 to 600 (pack of 5)	0	0 to 5 : 3BA09304 5 to 50 : 3BA09305 50 to 600 : 3BA09306
164	Remote B channels re- cording	0 to 600 (pack of 5)	0	0 to 600 : 3BA09360

Notes:

- license 'CSTA NICE Recording" is mandatory in any case;
- license "B channels recording" is only required if the voice logger is using the dedicated recording link;

license "Remote B channels recording" is only required if the voice logger is using the dedicated recording link in a network configuration (by using B channels on a remote PCM2 board)

Acronyms and Definitions

Acronyms

ABC-F	Alcatel Business Communication
ACD	Automatic Call Distribution
ACSE	Association Control Service Element
API	Application Programming Interface
ASN.1	Abstract Syntax Notation One
BUSY	Busy tone
CAS	Channel Associating Signaling
CCD	Call Centre Distribution
CCS	Common Channel Signaling
CSTA	Computer Supported Telecommunications Applications
CTI	Computer and Telephony Integration
DASS2	Digital Access Signaling System 2
DPNSS	Digital Private Network Signaling System
DSP	Digital Signal Processor
DTO	Tone Detection
ECMA	European Computer Manufacturer Association
GAP	Generic Access Profile
GPA	General Purpose Auxiliary board
GSM	Global System Mobile

I/O	Input/Output
ISO	International Organisation for Standardisation
ISDN	Integrated Services Digital Network
IVR	Interactive Voice Response
LE	Low End
MAO	Management Objects
NDD	None Direct Dialing In
PCX	Private branch exchange
PCM	Pulse Code Modulation
QSIG	Q Interface Signaling
RINGING	Ringling tone
TSA	Telephony Server Assistant
Tx	filter on the detection of voice signal
Ty	filter on the non detection of voice signal
UA	Universal Alcatel
VAD	Voice Activity Detection
VVLE	Very Very Low End

Definitions

Agent	a CSTA user associated with one or more ACD devices or ACD groups and authorized to act on behalf of the provider of the CSTA application
B channel	a 56 or 64 Kbps channel on an ISDN or proprietary PBX line that can carry voice or data
Computing Function	the part of the domain needed to support CSTA applications that is also within a Computing or Special Resource sub-domain
Connection identifier	an identifier used to identify a relationship between a specific call and a specific device; the Connection Identifier comprises a Call Identifier and a Device Identifier; together, these identifiers specify a unique CSTA Object in the context of a CSTA Association
Correlator Data	computing domain-specific data associated with a call and used to track a call as it is controlled and monitored by the computing function
CSTA events	a message provided by the switching function to the computing function to indicate a change of the state of a CSTA object; events are subcategorized into Call Control, Call Associated, Media Stream, Physical Device, Logical Device, Media Attachment, Voice Unit, Maintenance, and Private events
I/O service	service allowing a computing function to send a data stream to or receive a data stream from a device in a switching sub-domain
Monitoring services	the services provided by the switching function by which the computing function may receive notification of changes in the switching function; the computing function indicates interest in certain switching function changes, and thereafter receives notifications of those changes via events
Private information	implementation-specific information
Status Reporting service	service through which system and other status information is passed between the Switching Function and the Computing Function

Switching Function

the part of the domain needed to support CSTA applications that is implemented within a switching sub-domain

Switching Function service

a service provided by the switch that can be invoked by a computing function or by manual telephone activity

Voice Unit

a special resource function that allows messages consisting of voice stream data to be created, manipulated, played to a connection, or recorded to a connection