



Administrator's Guide

Volume 2. Operation of the CTS Server

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The provided components of eXpress CS as part of the delivery are intended exclusively for demonstration of functionality and are not intended for operation in a productive environment. For the correct functioning of eXpress CS, it is necessary to develop an architectural scheme of the installation taking into account the specifics of the infrastructure for productive operation.

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INTRODUCTION

This manual is intended for administrators of the product eXpress Communication System (hereinafter referred to as eXpress CS, eXpress, system). This volume contains general information about the system, as well as information necessary for operating a corporate server.

Product Support Service You can contact the product support service by e-mail <u>support@express.ms</u>. The page of the product support service on the Unlimited Production website is available at <u>https://express.ms/faq/</u>.

Website. Information on the product by Unlimited Production can be found on the website <u>https://express.ms/</u>.

List of volumes of the Administrator's Guide:

- Volume 1. "Administrator's Guide. Installation.
- Volume 2. "Administrator's Guide. Operation of the CTS Server.
- Volume 3. "Administrator's Guide. Operation of the ETS Server.
- Volume 4. "Administrator's Guide. Installation and Operation of the RTS Server (available upon request).



TERMS AND DEFINITIONS

Term	Definition
AD	Active Directory is Microsoft Corporation's directory service for the Windows Server operating systems
API	Application programming interface — the interface enabling communication between software programs and applications
APNS	Apple Push Notification Service
botX	A platform for chatbot development
CTS	Corporate Transport Server
ETS	Enterprise Transport Server
FCM	Firebase Cloud Messaging is a service that simplifies messaging between mobile applications and server applications
JSON	JavaScript-based text-based data interchange format
KeyCloak	User directory service. An open source identity and access management solution for use in information systems
NTLM	Network Authentication Protocol developed by Microsoft for Windows NT
RTS	Regional Transport Server
SIEM	Security information and event management
Single CTS	Single Corporate Server
SmartApp	SmartApp is a web application, which is implemented as an add-on, executed inside Express, and designed for accessing corporate services and systems
SMTP	A network protocol designed for e-mail transmission in TCP/IP networks
SSL	Cryptographic protocol for secure communication
STUN	A network protocol for discovering an external IP address, used to establish a UDP connection between two hosts when they are both behind a NAT router.
TLS	Transport Layer Security Protocol
TTS	Transport Transfer Server. A server designed to transmit messages between corporate servers instead of the RTS server, including between the CTS servers that do not have a trusted connection with each other (non-trusted CTS servers)
TURN	A protocol for receiving incoming data over TCP or UDP connections
VAPID keys	Voluntary Application Server Identification involves a pair of keys: a public one and a private one. The private key is kept secret by the server whereas the public key is passed to the client. The keys allow the push notification service to know which application server signed the user and to be sure that it is the same server that sends notifications to a particular user.
VoEx	Voice Over Express — part of Express CS, which includes call management, call recording, SIP telephony, and integration with other types of telephony
Widget	A structural element of the panel responsible for visual display of a part of information collected by the system.
Videoconferencing	Multicast videoconferencing
CTN	Corporate data transmission network
Cache	A fast-access intermediate buffer containing information that is most likely to be queried
TSP	Trusted Services Platform
PC	Personal Computer
Decoupled CTS	Decoupled Corporate Server (Front CTS and Back CTS)
Routing	The contour, in which a chat exists (corporate, public, mixed)
Trust	A service for data transmission between the CTS and RTS and other services within their contour

Chapter 1

GENERAL INFORMATION

PURPOSE OF THE SYSTEM

eXpress CS is designed to provide high-quality continuous communication between the company's employees and to reduce the risk of information leaks by moving the exchange channels from the Internet into the perimeter of the Company's local computer networks.

MAIN FUNCTIONS

eXpress CS performs the following main functions:

- enabling fast exchange of text messages and files by users with the help of mobile devices and the web client on PCs within personal and group chats;
- making personal and group audio and video calls;
- ensuring secure storage and transmission of confidential data;
- creating copies of data to restore the subsystem's functionality when it is damaged or destroyed;
- streamlining the use of resources.

Important! For all the described functions to work properly, the application and server versions must match.

MAIN COMPONENTS

eXpress CS envisages three user interaction contours (which can be supplied in three versions):

- public (external);
- enterprise contour (company's internal contour, which combines several internal servers);
- corporate (internal).

The public (external) user interaction contour is used for:

- initial registration of users;
- sending push notifications;
- exchanging messages and files with users who are not connected to any internal contour;
- making calls by users not connected to any internal contour;
- routing messages and files between internal contours that have no direct trusted connections.

The enterprise contour (internal company contour) is used for:

- registration of users;
- sending push notifications;



 routing messages and files between corporate contours that have no direct trusted connections.

The corporate (internal) user interaction contour is used for:

- registration of corporate users;
- exchanging messages, files and making calls to corporate users;
- providing a corporate address book;
- routing messages and files between the company's corporate contour and corporate contours of partners, with whom trusted connections are established.

eXpress CS incorporates the following separately installed components:

- regional eXpress server (hereinafter referred to as the "RTS server");
- enterprise server (hereinafter referred to as the "ETS server");
- corporate eXpress server (hereinafter referred to as the "CTS server");
- Media server;
- Bot Server;
- Mobile app;
- Desktop app;
- Web app.

Attention! For all the described functions to work properly, the application and server versions must match.

The RTS, ETS and CTS servers are the main elements in the system architecture.

The RTS brings together and maintains computer networks within one region and is responsible for the operation of the public interaction contour.

The ETS server brings together and maintains computer networks and corporate servers within one large company and is responsible for the operation of the enterprise contour.

A customized application is released for the ETS server, which is managed by the company operating the ETS. The CTS server users, which are connected to the ETS server, receive SMS messages and push notifications from this ETS server (for more details, see the document "Administrator's Guide. Volume 3. Operation of the ETS Server").

The CTS server connects and maintains client devices within the organization, connects to the ETS server or the RTS server and acts as an intermediary between the client device and the ETS/RTS server. The CTS server is responsible for the operation of the enterprise contour. Once the ETS server has been installed, information exchange between the corporate servers takes place within the enterprise, data from the CTS server is transmitted to the ETS server, and the ETS server performs information exchange with the external contour.

The client device can connect to both the CTS server and the ETS server or the RTS server directly. For each server, a user registers their profile. Depending on the active profile, the user has access to their resources in the form of chats, contacts and messaging history. The client can connect to the CTS server once a connection to the RTS or ETS server has been established. All messages transmitted between corporate users are stored on the CTS server and are not accessible to server administrators.

A separate Media server is used to support voice and video calls.

If the number of users is 100 or more, the Transcoding server is detached from the Media server to a separate server.

For the deployment of chatbots and SmartApps, a separate server (Bot Server) is used.

For integration of the ATE system, the SIP-telephony module is used, which allows making and receiving voice calls, maintaining the phone book and matching users with ATE numbers ("Caller ID").

Voice Over Express (VoEx) — part of Express CS, which includes call management, call recording, SIP telephony, and integration with other types of telephony.

The system is managed via administrator web interface, which makes it possible to configure eXpress and control the operation of the application.

PROTECTION MECHANISMS

The security of transmission of confidential data is ensured by the following protective mechanisms implemented by eXpress CS:

- role-based access control method;
- multi-level method of authentication and identification of users, including the use of additional authentication tools;
- use of cryptographic means to protect communication channels outside the controlled area;
- a set of solutions for backup and recovery of system data.

Additional mechanisms have been implemented for working in unstable networks or in networks with low quality:

- local access to data on the device when there is no network connection;
- access to local copies of previously sent and received data in the event of no connection to the server, including:
 - viewing the local contact list;
 - viewing downloaded chat history cache;
 - full-text search through the correspondence history;
 - viewing previously received and sent files, a copy of which is contained on the client device.



AVAILABLE ROLES

The system is managed by the organization's employees with administrator rights. The administrative rights in the system are assigned hierarchically.

For the safe and successful operation of Express CS, the following roles are identified during installation (Table 1):

Table 1

Role	Rights	Account type
Administrator	 role assignment; viewing security log; managing chats; managing user accounts; connecting chatbots; managing system settings 	Internal User
Corporate User	 sending messages; creating a chat; viewing the server address book; connecting to chatbots 	Internal User
Security Manager	 viewing messages in the DLPS web interface; viewing logs in the DLPS web interface; 	Internal User

The specific assignment of administrator access rights is determined by the policy of the company using eXpress CS.

The type of account depends on the position of the server on which the user is authorized. If there is a RTS server within the protected contour, a regional user becomes an internal user.

eXpress CS envisages the creation of administrators with limited rights for specific tasks.

Administrators' tasks:

- installation and management of updates of system-wide and application software;
- configuration, maintenance and monitoring of server equipment;
- backup management and data recovery;
- centralized configuration of the Mobile app;
- managing user accounts.

Within the framework of the role model for individual user groups, the administrator can set restrictions for users with regard to operations with attachments and the use of the PIN code:

- prohibition of sending/forwarding attachments to chats;
- prohibition of downloading/viewing attachments in chats;
- prohibition of downloading attachments from CTS users;
- prohibition of the ability to forward/share/save attachments to the device's memory;
- mandatory use of the PIN code when the user enters the application.

First, the administrator creates user groups in the User Groups section to which the restrictions will apply, and then, in the Role Model section, sets the rules that the restrictions will be subject to.

Restrictions can be configured for specific users or specific groups based on server affiliation.

CONTACTS MANAGEMENT

The administrator manages user accounts (contacts).

The administrator can:

- add a new user to the corporate and enterprise contours if authorization via email is configured;
- manage the connection of users to the corporate contour;
- connect the CTS/ETS server to the RTS server;
- connect the CTS server to the ETS/RTS server;
- establish and configure trusts between the CTS servers;
- delete user accounts on the CTS servers if e-mail authentication is configured;
- manage user accounts (create, edit, delete) and manage administrator access rights.

REGISTRATION SYSTEMS

The following methods are available to the administrator to configure user registration/authorization in the system:

- Active Directory (NTLM);
- E-mail;
- OpenID.

eXpress CS can operate in conjunction with the Active Directory directory service (hereinafter referred to as the "AD"). Changes made to user accounts in AD are reflected in the corresponding accounts in eXpress.

When using OpenID as a registration/authorization method, Express CS uses the integration of the CTS server with KeyCloak. The KeyCloak directory service is a set of general-purpose or special-purpose software tools that provide management of the creation and use of user accounts.

User registration/authorization in the system via e-mail does not require additional integration and is provided by eXpress's own tools.

Chapter 2

CORPORATE SERVER OPERATION

This chapter describes the main sections and procedures for working in the CTS server administrator web interface.

AUTHORIZATION IN THE ADMINISTRATOR WEB INTERFACE

To authorize in the administrator web interface:

An authorization window will open (see Figure 1):

1. In the address bar of your browser, enter the address of the administrator web interface (https://cts_host/admin).

Password Sign in	*	Login
Sign in		Password
		Sign in

Figure 1

- 2. Enter the account name and password in the appropriate fields.
- 3. Click "Login".

The main window of the administrator web interface will open - "Chats" (see Figure 2).

e Xpress	Chats	search by name, huid		
A Users	Name ~ ~	Routing	Chat type ~ ~	Updated at
🗣 Chats	O assessment of the first of th	cts	chat	2024-11-19 11:07:53.802250Z
Open chats	O international states	cts	group_chat	2024-11-15 15:41:02.789931Z
Calls	O Internation	cts	bobx	2024-11-15 14:21:46.744207Z
U Logout list	O manufacture insure income	cts	chat	2024-11-15 13:43:42.553093Z
Administrators	O free incomes	cts	notes	2024-11-15 11:19:36.154791Z

Figure 2

To exit the administrator web interface, click 🖙 in the upper left part of the window. An authorization window will open with the corresponding message (see Figure 3).

Sign	ed out	×
å	Login	
	Password	
	Sign in	

Figure 3

DESCRIPTION OF ADMINISTRATOR WEB INTERFACE

This subsection describes the appearance of the administrator web interface using the example of the appearance of the "Users" section (see Figure 4).

	1.	User	s	3				O Create	📥 Downio	ad as .CSV	name, contact		search
	Users (2)	<u></u>	AD Login ~ ~	4	AD E-mail	Domain ^ ~	Name ~ ~	Sync source ^ ~	Active ~ ~	Type ^ ~	Company ~ ~	Position ~>	/
	Chats	0	Internal records	ign_bot			Receivings 8	3000	true	botx			
9	Open chats												
5	Calls	0	internal poli, but				Political	1000	true	botx			
	Conferences	0	Harrid Holdhad	form, Jud			Notifications 3	justs.	true	botx			
	Profile change request list												
	Logout list	0	gani /vritik				Terranal re-	pent	true	guest			
	Administrators						14						
	Servers	-	Calmolite Service for	69			Calendarform	349	true	botx			
2	e Bots						1000						
	an Internal bots		invitated				trobalist	lada	true	botx			
0	External clients users	0	Part (Marrie)				Europe w	part	true	guest			
(i) in	Audit						crossal recha						
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2	Role Model	_							true	outomal allant	110		
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ç	Call recordings					for the first second second			true	cto upor			
		•			reground our	Score represented	and the second second	-	uue	cis_user			
	Settings				100.70								
9	Administrators authentication	0	portara bipari	our Cigregross. in	aveflaria.https://		Test compa	1000	false	unregistered			1
U	Audit settings				tais-Cillespen								0
	Global chat				1.758								
	Global bots		papara27gg	rigil com	paposhacings		paperson and	and all	true	cts_user			
	Links to chats/calls								la ca	-			
	File Service		decelorment of the	or really as con	Series grad.		and the second s		true	cis_user			
å	User Session				1000								
- mê	Registration Settings	0	Sector re-auto	oshoti@grad.com	boltomo-autor		Aspept Incl.		true	cts_user			
	alla Active Directory				provide produces								
	🖀 E-mail				-								
	OpenID OpenID		matigned real		malignal real		Carrier and it.	10110	true	external_client	111	111	
đ	Profile fields visibility												
2	E-mail		poserus contena	100,000			concerns w	1000	true	DOIX			
	instruction	~	anui anatao				-	100	true	boty			
	Blocked users						10		000	both			
0	VoEx	0	print, 164				print, 100	505	true	botx			
8	Server						in the second		true	boty			
	Support Info						manage		1.94				
20	c SmartApps	0	harman and	whee-online			Instruments.	lasts.	true	botx			
	Mobile menu configuration						snafag-od						
	Web and Desktop menu configuration	0	100,000				task, resp	2002	true	botx			
	Activations	0	prosting a place	110	analasius pine	holid, express, re-	anantine tan an	-	false	unregistered			
					ungbeitek sugs		1010						

Figure 4

The administrator web interface consists of the following blocks:

1. Current user login, logout and edit buttons in the top left corner.

- 2. A menu for navigating through sections of the administrator web interface, located on the left side of the window.
- 3. Window header. Contains the name of the current section (menu item), and may also contain controls and a search bar.
- 4. The working area that occupies the main area of the window.

In sections designed for storing and processing large amounts of data, the work area is presented in the form of a table.

To sort data in forward and reverse order, use the \wedge and \vee buttons in the column header.

To search for data, enter the corresponding value, in whole or in part, in the search bar in the upper right corner of the window and click "Search".

The menu consists of items that allow the system administrator to perform the operations listed below in Table 2.

Document section	Menu item	Purpose	Description in the document	
Server Management	Servers	Viewing and setting up connections to other servers	page 17	
	Server	Setting up the appearance of the application. Setting up the TLS and Botx SSL certificates. Viewing the identifiers of the current CTS server and the RTS server it is connected to. Viewing versions of installed services	page 25	
	VoEX	page 31		
	E-mail Setting up the SMTP server and e-mail from p which e-mails are sent from the server to recipients		page 35	
Contacts Management	Setting Up Registration	Setting up user account connections	These sections are described in	
	Active Directory	Setting up account registration via Active Directory	the document "Administrator's	
	E-mail	Setting up an e-mail mask for account registration	Installation".	
	OpenID	Setting up account registration via OpenID		
	Users	Viewing account information; Exporting data to a file	page 37	
		Creating an account	page 38	
		Setting up an Account	page 41	
	Visibility of Profile Fields	Setting up data access levels in a corporate server user profile	page 46	
	Activations	Setting up user session activity time	page 48	
	Instructions to Get Started	Setting up sending and text of the instruction to start working with the application	page 48	
	Locked Out Users	Setting up sending options and text of account lockout e-mail notifications	page 50	
	Logout Requests	ogout RequestsViewing the list of requests to log out from the corporate server.Accepting and rejecting requests		
	List of Change Requests	Viewing the list of requests to change user profile data. Accepting and rejecting requests	page 53	
	Support Contacts	page 54		
	Users of external clients	Section under development		

Table 2



Document section	Menu item	Purpose	Description in the document
Role Model and User Groups	Role Model	Creating restrictions for users on operations with attachments and using a PIN code when entering the application	page 54
	User Groups	Creating user groups for use in the role model	page 54
Managing Administrator	Administrators	Viewing information about administrators and administrator groups	page 54
Accounts		Setting up administrator accounts	page 65
		Creating, deleting, setting Up administrator groups	page 66
	Authentication of Administrators	Setting up administrator connections from Active Directory	page 64
Calls and Conferences	Calls	Viewing information about group calls. Terminating unfinished group calls	page 72
	Conferences	Viewing information about the conferences. Terminating unfinished group calls and conferences	page 72
	Call Quality Ratings	Viewing user ratings of call or conference quality	page 77
	Call Recording	Viewing the processing queue of call and conference records	page 80
	Links to Chats and Calls	Setting up personalized links to join a closed chat, channel, video conference, or call	page 83
Managing Chats	Catalog	Managing the display of the chat directory "showcase": sorting the list of open corporate chats, channels and chatbots	page 86
	Chats	Viewing information about chats and chat events:	page 86
	Open Chats	 viewing information about the chats; creating and deleting open chats; changing chats from open to closed 	page 92
	Global Chat	enabling and disabling global chat;setting up global chat settings	page 94
Chatbots and SmartApp	Bots	Chatbot management: viewing information, setting up, deleting, establishing connections:	page 95
	Internal Bots	changing and setting up internal bots;adding administrator for bots	page 99
	Global Bots	adding global bots to the global chat;removing global bots from global chat	page 99
	SmartApps	 management of the display of the SmartApp item in the main menu of eXpress CS; setting up display parameters in the main menu of the SmartApp items "Home" and 	page 102
	Mobile Clients	"Services" Setting up the SmartApp menu configuration	page 105
	Menu Setting up Web and Desktop	for mobile clients Setting up the SmartApp menu configuration for web and desktop apps	page 107
Managing File	clients menus File Service	Setting up access paths to files transmitted in	page 108
Service		chats Setting up storage and deletion periods for	page 109
Logs	Containors	files	nago 111
LUYS	Audit Sattinga	Activating and deactivating tracking of uppr	
	Audit Settings	Setting up sending of information about security events to the SIEM of the information system into which Express is integrated	page II2
	Audit	Audit of administrator and user actions	page 114



Document section	Menu item	Purpose	Description in the document
Application Performance Statistics	Statistics	Viewing application performance statistics	page 118
Managing Stickers	Stickers	Viewing sticker packs and their elements. Adding and removing sticker packs and their elements. Customizing sticker packs	page 121

SERVER MANAGEMENT

This section describes the following administrator web interface menu items:

- Servers;
- Server;
- VoEx.

The "Servers" section contains information about connecting the CTS server to other servers. The administrator can view the interactive graphical connection routing diagram, as well as configure connection to the CTS:

- to transport servers (TTS);
- to other corporate servers using trusts;
- to RTS/ETS servers.

The "Server" section contains information about the CTS server and its operation settings.

In the VoEx section, the administrator can configure the operating parameters of Media server, SIP telephony and user rating of call or conference quality.

SERVERS

By default, this section is available in the "RTS" tab. It contains information about the connection of the CTS server to the RTS/ETS servers (Figure 5):

TTS	Trusts Graph	
S		
Name	Address	Server ID
RTS	ru.public.express	df8d6eb9-105b-4efb-a742-b909fae28d62
		debug info
	TTS S Name RTS	TTS Trusts Graph S Address Name Address RTS ru.public.express

Figure 5

Connection between servers is achieved using trusts. A trust is a service for data transmission between the CTS, ETS and RTS and other services in their contour.

Authentication when connecting between servers is performed with the use of tokens. A token is a sequence of characters that allows you to accurately identify an

object and determine its privilege level. It is generated by the system when creating trust connections and is linked to a specific connection.

The administrator can configure and establish trusts with other corporate servers, including those linked to different RTS/ETS servers. When trusts are established, information exchange between the CTS servers takes place directly, not through the ETS/RTS servers.

CONNECTING TO OTHER CORPORATE SERVERS

The following functionality is available to the administrator:

- Viewing information about a configured trust with another CTS server;
- creating a trust with another CTS server;
- editing a trust with another CTS server;
- deleting a trust with another CTS server.

To view information about a configured trust with another CTS server:

1. In the "Servers" section, go to the "Trusts" tab.

A window will open (see Figure 6):

Name	Address	Server ID	Added by	
had not rely others	had projection to be a submary	and one pair the second strength	princero.	
Token for accept conne	ection from remote server		Token for connect to remote server	
	Figure Research product of production of the second secon second second sec			

Figure 6

2. Click on the name of the CTS server with which the trust has been established. A window will open (see Figure 7):



pred leal corp. express	🖋 Edit 🛛 🛍 Delete	Info for integrators	
ID: Province and the second second second		MARKE OF A DESIGN OF THE ARE ATTACT OF	-
Type: trust		terminal participants complete and	. I
Endpoint:		termine the design of the Section of Specific and the Section of t	2
Allow trust search: true		0.22 Total de la article article de la participación com anter acchange	6
Vailable at: 2024-11-22 09:13:53.729534Z		K. Standarder, M. Stranger, M. Standard, "Reserve and the standard strangenetic spread system in the strangenetic spread system in the strangenetic spread system." In Proceedings of the strangenetic spread system in the strangenetic spread system in the strangenetic spread system. "In Proceedings of the strangenetic spread system in the strangenetic spread system." In Proceedings of the strangenetic spread system in the strangenetic spread system in the strangenetic spread system. "In Proceedings of the strangenetic spread system in the strangenetic spread system." In Proceedings of the strangenetic spread system in the strangenet system in	
Dreated at: 2024-05-29 15:55:47		and Report of some found to their procession temperature of	6
Updated at: 2024-08-14 08:55:40		April 2010 Annual Contract Statements	~ I
Token for connect to remote server		transports and his error regiment	
aperte anticas capacità canto desegue i Spectros e contra desente approprieto de	*	Сору	
Сору			
Token for accept connection from remote se	rver	Peers	
Physical and Phone and Physical Street			
-		100.00.00.00.00.000	
Сору			
		100-000-00-00-000	

Figure 7

The window that opens contains the following information (Table 3):

Table 3	
Parameter	Description
ID	ID of the CTS server with which the connection has been established
View	Connection type
Endpoint	CTS server connection address
Allow trust search	 Allows another server to access the corporate contact book of the server on which the trust is created. Possible values: true – access granted; false – access denied
Availability	Date and time of last connection
Creation date	Trust creation date
Update date	Date on which the trust was last modified
Token for connection to a remote server	Connection token
Token for connection from a remote server	Token for accepting connection
Information for integrators	Data for setting up trusts between servers



Trust creation date:

1. Click "Create" in the upper right corner.

A window for creating a trust and setting its parameters will open (see Figure 8).

reate trust	i≣ Back to list
mote CTS ID	
me	
ken for accept connection from remote server	
CHqLdF3k+H6zktJSIcxq81uu/86GeEbyYKGu0TUA/v4eBVTYSE	DsrzV/jGA6SEkWR+fZP
en for connect to remote server	
IpoInt Connection config	
App gateway url	
Transport encryption (choose from: tis, tis_probe, libsodium or lea	ave blank)
App gateway enabled	
Allow trust search	
Save	

Figure 8

2. Fill in the fields of the form (see Table 4):

Table 4

Field	Description
CTS ID	ID of the CTS server with which the connection will be established. The CTS server ID is stored in the "Server" menu item in the administrator web interface of this server
Name	Short designation for the trust to be created
Token for accepting connection	Token name. Example: You need to create a trust between two servers: CTS1 and CTS2. To solve this issue, the administrator creates a trust on each of the servers, while specifying tokens in the settings in such a way that the token for conneciton on the CTS1 server matches the token for accepting connection on the CTS2 server, and vice versa
Connection token	Token name
Endpoint	Server connection address. In the table with the list of tokens, the data from this field is displayed in the "Address" column
Allow trust search	Allows another server to access the corporate contact book of the server on which the trust is created. Trust search is available if Corporate Search is enabled in the server settings

- 3. Click "Save".
- Go to the administrator web interface of the corporate server (in the example given in the description "Token to accept the connection" – CTS2) with which the connection is established, and create a trust with the current server (CTS1).

To edit a trust, click and make changes in the window that opens.

To delete a trust, click 🕮 .

CONNECTING TO TRANSPORT SERVERS

Transport servers (TTS — Transport Transfer Server) are designed to transmit messages between corporate servers instead of the RTS server, including between the CTS servers that do not have a trusted connection with each other (non-trusted CTS servers). The system determines the optimal route for transmitting messages: via RTS or TTS. If RTS is not available, traffic is sent via TTS.

The following functionality is available to the administrator:

- Viewing information about connected transport servers;
- establishing connections to transport servers;
- editing connections to transport servers;
- deleting connections to transport servers.

To view information about connected transport servers:

1. In the "Servers" section, open the "TTS" tab

Information about connections to transport servers will be displayed on the screen (see Figure 9).

RTS	TTS	Trusts	Graph		
TT	S			іd, хост, кем добавлено Осиск ФСоздат	Пь
	RMN	Host	ID сервера	Кем добавлено	
•	tts1		6f8ccb876f8cc		r
					1
1	l				

Figure 9

2. Click on the name of the transport server.

A window will open (see Figure 10):

pred test corp. express	P Edit 📋 Delete	Info for integrators
ID:		server in a manufacture one of a first server
Type: tts		care process or company
Endpoint		same to properly off the internet of the second sec
Available at:		and the acceleration of a systematic second and
Created at: 2024-05-29 15:55:47		If Charles and
Updated at: 2024-08-14 08:55:40		and the set of a sector of the sector and the sector of th
Token for connect to remote server		California - California - California
print the second second second	· · · · · · · · · · · · · · · · · · ·	
	1	Сору
Сору		
Token for accept connection from remote	server	
Propulsion (Propulse Sight (re-		
in course and product strangers of	1	
Сору		

Figure 10

The window that opens contains the following information (see Table 5):

Table 5

Parameter	Description
ID	ID of the TTS server with which the connection has been established



Parameter	Description
View	Connection type
Endpoint	TTS server connection address
Availability	Date and time of last connection
Creation date	Connection creation date
Update date	Date on which the connection was last modified
Token for connection to a remote server	Connection token
Token for accepting a connection from a remote server	Token for accepting connection
Information for integrators	Data for setting up trusts between servers

To establish a connection to the transport server, click "Create" and fill in the form fields (see Figure 11, Table 6).

Create tts	I Back to list
Remote TTS ID	
Name	
Token for accept connection from remote server	
GGT9XcK3Sd06CoO2PuJl2bEqRm+ktuNqFlw31JNUYBbbc	/T0c978/bpSS+uCGZeByBs
Token for connect to remote server	
Connection config	
App gateway url	
Transport encryption (choose from: tis, tis_probe, libsodium	or leave blank)
App gateway enabled	
Save	

Figure 11

Table 6

Field	Description
TTS ID of the server to which the connection is established	ID of the TTS server with which the connection will be established
Name	Short designation for the transport server being created
Token for accepting a connection from a remote server	Token name. Generated automatically
Token for connection to a remote server	Token name
Endpoint	Server connection address

To edit a connection to the transport server, click \checkmark and make changes in the window that opens.

To delete a connection to the transport server, click $\begin{tabular}{ll} \widehat{} \end{array}$.



CONNECTING TO REGIONAL AND ENTERPRISE SERVERS

The following functionality is available to the administrator:

- viewing information about connected RTS/ETS servers;
- reconnecting to RTS/ETS servers;
- editing connection to RTS/ETS servers;
- removing connection to RTS/ETS servers.

To view information about connection to RTS/ETS servers:

1. In the "Servers" section, open the "RTS"/"ETS" tab.

The screen will display information about the RTS server (if this CTS server is connected to the RTS server — see Figure 5) or about the ETS server (if this CTS server is connected to the ETS server — see Figure 12).

RTS	TTS Tru	sts Graph	
RI	S		
	Name	Address	Server ID
•	RTS	n.patte.organis	erisekeen one- anto oneriacieno
1			
			debug info trace outbox events invalidate relations cache

Figure 12

2. Click on the RTS/TTS server name.

A window (Figure 13) will open with information about the server and a menu of available operations:

ID:	
Type: rts	
Host	
Endpoint:	
Available at: 2024-11-07 12:38:10.647450Z	
Created at:	
Updated at:	

Figure 13

The "Peers" section displays the IP addresses of servers connected to this RTS/ETS server.

To reconnect to the RTS/ETS server, click on the "Reconnect" link and confirm the action by clicking "OK" in the modal box that opens.

To edit a connection to the RTS/ETS server, click ^e and make changes in the window that opens.



To delete a connection to the RTS/ETS server, click and confirm the action by clicking the "OK" button in the modal box that opens.

GRAPHICAL CONNECTION ROUTING DIAGRAM

The following functionality is available to the administrator on this tab:

- viewing the graphical connection routing diagram;
- viewing information about a specific server.

To view the graphical connection routing diagram, open the "Graph" tab (see Figure 14):



Figure 14

Servers are indicated in the diagram with colored circles, depending on the type:

- RTS green;
- ETS purple;
- CTS blue.

For ease of viewing, diagram elements can be dragged with the mouse.

To view information about a specific server in the diagram:

1. In the "Graph" tab, click on the circle that represents the respective server.

The address of the selected server and the number of chats created on it will be displayed in the upper right corner of the screen (see Figure 15).







2. Click on the server name in the upper right corner of the screen.

A window will open with information about the RTS/ETS/TTS server through which data is exchanged with the current server (see Figure 16 and Figure 17).

KIS								
Name	Address		Server ID					
RTS	0.96%.09950			100 A.D. 270 1000				
1								
					debug info	trace	outbox events	invalidate relations c
ure 16								
DTC	Deconnect	AEdit	🛱 Doloto					
RTS -	Reconnect	🖋 Edit	Delete					
RTS -	Reconnect	🖋 Edit	🛍 Delete					
RTS -	Reconnect	dit 🖉	🛍 Delete					
	Reconnect	🖋 Edit	Delete					
RTS ✓	Reconnect	🖋 Edit	Delete					
RTS ✓	Reconnect	✓ Edit	Delete					
RTS ✓ ID: Type: rts Host:	Reconnect	Je Edit	Delete					
RTS ✓ ID: Type: rts Host: Endpoint:	Reconnect	dit €dit	Delete					
RTS ✓ ID: Type: rts Host: Endpoint:	Reconnect		Delete					
RTS ID: Type: rts Host: Endpoint: Available at	Reconnect	✓ Edit 2:38:10.64	Delete					
RTS ID: Type: rts Host: Endpoint: Available at Created at:	Reconnect	✓ Edit 2:38:10.64	Delete					
RTS ID: Type: rts Host: Endpoint: Available at Created at:	Reconnect	✓ Edit 2:38:10.64	Delete					
RTS <	Reconnect	✓ Edit 2:38:10.64	Delete					
RTS ID: Type: rts Host: Endpoint: Available at Created at: Updated at:	Reconnect	✓ Edit 2:38:10.64	Delete					
RTS <	Reconnect	✓ Edit 2:38:10.64	Delete					



SERVER

The "Server" section consists of several sections that provide information about this CTS server (see

Figure 18), as well as the parameters for setting up its operation.

The following functionality is available to the administrator:

- setting up display of server information and loading of application backgrounds on user devices;
- setting up the display of the contact list and searching for contacts in the • application;
- setting up end-to-end encryption in group chats and channels; .
- setting up the user consent screen with the rules of information exchange; •
- setting up user notification parameters about server maintenance; •
- setting up user notification settings for application version updates;
- viewing information about CTS server identifiers; •



- setting up parameters for using the TLS protocol in trust connections;
- setting up chatbot certificate application parameters;
- entering administrator contact information;
- setting up customer support contact settings;
- viewing the list of services installed on the CTS server and their versions.



Server Settings	RTS ID	Service versions
-		
	artadoleti jatal nofti yine anteriwchilezi	ad_integration 3.36.1
		admin 3.36.0
	CTS ID	botx 3.36.0
	Sample of Sector State Mark Structure States	email_notifications 3.36.0
		kdc 3.36.0
		messaging 3.36.1
	Trusts TLS Certificate	nhonebook 3.36.0
Avatar Clear Choose File No file chosen	Certificate Certificate is not present	pronebook 3.30.0
Mobile background Clear	Choose File Nen	file_service 3.36.3
Choose File No file chosen	Choose File Nen	routing_schema 3.36.0
Mobile dark background Clear Choose File No file chosen	Save	settings 3.36.0
Neb background Clear		trusts 3.36.1
Choose File No file chosen	BotX SSL Certificate	voex 3.36.0
Veb dark background Clear		metrice service 3.36.0
Web high resolution background Clear	Certificate Certificate is not present Choose File Nen	
Choose File No file chosen	Save	corporate_directory 3.36.0
Web dark high resolution background Clear		
Choose File No file chosen	A durin lufe	
Save		
	Full name	
Server Features	Phone	
Corporate search Trust search	Address	
 Enable e2e encryption by default in group chats Enable e2e encryption by default in channels 	Emails (comma constated)	
 Disable corporate phonebook Allow the user to control their avatar 		
Moderate user's requests for profile changes	Save	
Save		
Notification during logging in		
Show the user when logging in *Whether to show the document to the user when they first		
log in Consent, ru View		
Choose File No file chosen		
Consent, en View		
CHOUSE FILE NO THE Chosen		
Save		
Notification of technical works		
] Enabled		
echnical work is underway, there may be some problems with the app.		
Inder maintenance alert, ru		
Jnder maintenance alert, en		
Technical work is underway, there may be some proble		
Save		
Set default alert text		
Notification about update		
The user will get a notification if an app update is		
available. 2 Notify about an existing update		
2 Block application interface until update is started		
0		
Enabled for: D 102 C Antonia E D 11		
Enabled for: U IUS U Android V Desktop		



SERVER SETTINGS

In the "Server Settings" section, the administrator sets the corporate style and wallpaper in chats by uploading files with the following images:

- CTS avatar;
- mobile application background;
- web application background;
- dark web application background;
- high resolution web application background;
- dark high resolution web application background,

and also sets up the option to display/hide server name by checking the "Hide server name" box.

Note. A 1000x1000 px raster square seamless image or a 1000x1000 px vector image should be used for the background.

These settings are recommended for use in cases where the number of connected users is less than 500. When the number of connected users is more than 500, the active setting will overload mobile devices.

To save your settings, click "Save".

SERVER FEATURES

The "Server Features" section allows to customize:

- display of contact list and search for contacts in the application;
- end-to-end encryption in group chats and channels;
- settings for changing user profile data.

To customize the display of the contact list and contact search, check the corresponding fields. The available customization options are described below in Table 7.

Note. To perform a Trust search, be sure to enable "Corporate search" and ensure that "Trust Search" is enabled for the trust connection (see page 18).

_	_			-
		h	0	
		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-	
	-	•••	-	

Corporate search	Trust search	Disable corporate phonebook	Result
~	~	×	The app's contact list only displays contacts from the user's phone and corporate contacts. Starting from the 3rd character entered in the search line, the search for contacts on the corporate and trust servers is enabled, as well as the search for contacts with whom the user has common chats.
~	*	*	The app's contact list only displays contacts from the user's phone and corporate contacts. Starting from the 3rd character entered in the search line, the search for contacts on the corporate server is enabled, as well as the search for contacts with whom the user has common chats. Trust server search is not performed.
×	×	~	The app's contact list only displays contacts from the user's phone. When performing a search, contacts from the user's phone



Corporate search	Trust search	Disable corporate phonebook	Result
			are available, as well as contacts with whom the user has shared chats.
×	×	*	The app's contact list displays contacts from the corporate server and from the user's phone. When performing a search, contacts from the corporate server are available, and starting from the 3rd character entered in the search line, the search for contacts with whom the user has common chats is enabled.

To enable/disable end-to-end encryption in new group chats, set/unset the "End-to-end encryption enabled by default in group chats" flag. If the checkbox is checked, end-to-end encryption will be enabled immediately in group chats after creation by default. This setting does not affect end-to-end encryption in existing group chats.

To enable/disable end-to-end encryption in new channels, set/unset the "End-to-end encryption enabled by default in channels" flag. If the checkbox is checked, end-to-end encryption will be enabled immediately in channels after creation by default. This setting does not affect end-to-end encryption in existing channels.

To enable/disable the ability for users to change their avatar, check/uncheck the "Allow user to change avatar" box. If the box is checked, changing the avatar becomes available in the user profile.

To enable/disable moderation of data change requests in the user profile, set/unset the "Moderation of profile change requests" flag. If the box is checked, all changes to data in user profiles will be sent for moderation and will be displayed in the section "List of Change Requests".

AUTHORIZATION NOTIFICATION

In the "Authorization Notification" section, the user consent screen with the rules of information exchange is configured.

To enable/disable user notification upon authorization, check/uncheck "Display to user upon authorization" in the "Authorization Notification" block.

To upload a file with instructions, click "Choose file", select a file in .html format from the file system in Russian or English and click "Save".

To view the text of the agreement, click "View".

MAINTENANCE NOTIFICATION

In the "Maintenance Notification" section, notifications to the user about maintenance work being carried out on the server (disabled by default) can be configured.

To enable/disable maintenance notification:

- 1. In the "Maintenance Notification" block, check/uncheck the "Enabled" box.
- 2. Enter the notification text in Russian and/or English or click "Set default notification text" (see Figure 19).



NOU	
_ Ena	abled
Techni	cal work is underway, there may be some problems with the app.
Under	maintenance alert, ru
100	the management office, management applies pathon parameter
Under	maintenance alert, en
100	to a work a andressa, here may be some problems will be app
	Save

Figure 19

3. Click "Save".

After enabling the setting in the application, a notification will be displayed in the settings section stating that maintenance work is being carried out on the server.

If the setting is enabled, an icon \bigcirc will be displayed next to the "Server" section in the administrator panel.

UPDATE NOTIFICATION

In the "Update Notification" section you can configure the following:

- user notification about the availability of an updated version of the application for installation;
- the ability to block the application interface until the update.

To disable application /server update notifications, in the "Update Notification" block, uncheck the "Notify about available update" option and click "Save".

To enable interface blocking until application update, set the "Block application interface until update is started" flag in the "Update notification" block.

To disable interface blocking until application update, unset the "Block application interface until update is started" flag in the "Update notification" block.

To set up app/server update notifications:

- In the "Update Notification" block, set the "Notify about available update" checkbox.
- 2. In the "Versions Backlog" field, specify the number of updates after which the notification will start to be displayed.
- 3. Check the box next to the name of the operating system on which the notification will be displayed.
- 4. Click "Save".

Note. The indicator indicates the lag in the numbering of intermediate versions, for example 3.1; 3.2. That is, if the current version of the application is 3.3, then the notification will be displayed on client apps with version 3.0 and below. When the next version of the product is released, for example , 4, a notification about the update will be displayed in the user's application settings automatically.



RTS ID AND CTS ID

The "RTS ID" and "CTS ID" sections show the identifiers of the CTS server on which the administrator web interface is opened and the RTS server to which the CTS server is connected. Identifiers are used when setting up trusts.

TRUST TLS CERTIFICATE

In the "Trust TLS Certificate" section, enter data for using the TLS protocol in trust connections.

To enter data:

- 1. Upload files with information about the certificate and the key in the appropriate fields in the "Trust TLS Certificate" section.
- 2. Click "Save".

Note. It is allowed to use the TLS certificate used during the CTS server installation stage.

BOTX SSL CERTIFICATE

To connect the BotX SSL chatbot certificate, upload the certificate file and click "Save".

ADMINISTRATOR INFORMATION

In the "Administrator Information" section, enter the administrator information. This information is displayed in user apps when an error occurs during registration.

SERVICE VERSIONS

The "Service Versions" section contains a list of services installed on the CTS server and their versions.

VOEX

Voice Over Express (VoEx) — section of Express CS, which includes call management, call recording, SIP telephony, and integration with other types of telephony.

The following functionality is available to the administrator in the "VoEx" section:

- setting up the work of Janus instances;
- setting up the operation of TURN Server and STUN Server call servers and the VoEx local network;
- setting up the work of user rating of call quality;
- setting up SIP calls.

SETTING UP JANUS INSTANCES

The administrator can manage the operation of Janus servers in the web interface.

The following functionality is available to the administrator:

- adding Janus server;
- enable/disable Janus server;
- viewing information about the operation of Janus server;
- removing Janus server.



To set up a Janus instance (see Figure 20), in the "Janus Instances" section, enter the address of the Janus server and click . The server be displayed in the list on the screen, and the message "Janus URL added" will be displayed in the window header.

The server is disabled by default. To turn off the server manually, slide the switch to the left.

The server operating parameters are shown in Table 8:

Table 8

Parameter	Description
Disabled by whom	Shows who disabled the server. The server can be disabled automatically by the system or manually by the administrator.
Load	Total server load
Janus WS URL	Janus server address
Janus external host	Public IP of the Media server
publishers_n	Number of server users
audio_n	Number of users using a microphone
video_n	Number of users using a camera
screen_n	Number of users using the screen sharing function
recording_n	Number of users recording the call
rooms_n	Number of users using group call

Janus instan	ices						
Janus WS URL * ws://janus.com	n: 8188	Janus extern	al host	Janus internal	host		
Interface			Admin API URL		Admin API secret		
* ens192			* https://janus.com:7088			+	
Enabled	Disabled by	Load	Janus WS URL	Interface	Janus external host	Janus internal host	
••		380	we favoris ruß/98		an order to		û

Figure 20

Note. The load on the Janus server is calculated as follows: number of publishers + number of audio * n + number of video * m + number of screen * k + number of recording * l + number of rooms * i (the variables n, m, k, l, i are static and can be changed by the developer).

To remove a Janus server, select it from the list and click **1**. The server will be removed from the list and the message "Janus URL removed" will be displayed in the window header.



SETTING UP TURN SERVER AND STUN SERVER AND THE VOEX LOCAL NETWORK

To set up TURN SERVER and STUN SERVER and the VoEx Local Network:

- 1. Go to the "VoEx" section (see
- 2. Figure 21).

VoEx	
Enable screen sharing for corporate users outside of contour	
TURN Server (comma separated)	
STUN Server (comma separated)	
/oex local network	
Force relay ice	
Allow TCP ICE	
Enable audio streams mixing	
Enable VP9 videocodec support	
Enable use of internal host for servers	
list of servers which will use internal janus host (comma separated)	
Fachla chille de second culle	
Recording mode	
Video and audio	~

Figure 21

- 3. in the "TURN Server (comma separated)" field, enter the external FQDN of your Server and the port number separated by a colon, for example: ,,"express.firma.ru:3478".
- 4. in the "STUN Server (comma separated)" field, enter the external FQDN of your Server and the port number separated by a colon, for example: ,"express.firma.ru:3478".
- 5. In the "Local VoEX network" field, specify the local network mask.
- 6. Check the following boxes if necessary (see Table 9):

Table 9

Setting up	Description
Allow screen sharing outside of the closed contour	Allows the users to share their device screens with other users outside the CTN (RTS server users, trust server users, users who have left the CTN zone)
Use only Relay Ice candidates	Forced use of TURN server
Allow TCP ICE	The mark is set — TCP connection in TURN server is allowed. The mark is not set — TCP connection in TURN server is not allowed.
Enable audio stream mixing	Combines audio streams of calls directed from users to the server into one stream
Enable VP9 video codec	Item under development
Enable use of internal janus host for servers	Use the internal Janus host for the servers specified in the field below (see item 6)
Enable the ability to record calls	Allows users to record individual and group calls



Note. It is recommended to check "Allow screen sharing outside of the closed contour" and "Enable mixing of audio streams".

- In the "List of servers that will use the internal Janus host (comma separated)" field, enter a list of the CTS IDs of the servers with which communication will be conducted via the internal host.
- 8. Select the recording mode from the drop-down list.
- 9. Click "Save".

SETTING UP USER RATING OF CALL OR CONFERENCE QUALITY

To set up the user rating of call or conference quality feature:

- 1. Go to the "User Rating" section (see Figure 22).
- 2. Check the box "Enable call logging".
- Enter the data in the "User log storage" field from 0 to 36 (the default value is 12).
- 4. Enter the data in the "Call Quality Rating Frequency" field from 0 to 256 (the default value is 50).

Note. The "Always ask if there is an error in a call" checkbox is enabled by default. It is recommended to check the box Enable call logging".

Enable logs			
Always ask if	call has an error		
all's assessme	ent frequency		
50			
*Once in N ca	ls, 0 - never		
etention of us	er logs		
0			
*Value in mon	hs, 0 - never delete client lo	gs	

Figure 22

5. Click "Save".

SETTING UP SIP TELEPHONY

To set up SIP telephony:

- 1. Go to the "SIP" section.
- 2. Check the "SIP enabled" box (see
- 3. Figure 23).



SIP	
SIP enabled	
SIP Trunk integration enabled	
SIP Server	
Messaging SIP trunk external host	
SIP Invite User Host	
SIP Trunk service URI	
SIP Trunk Trusted Nets (comma separat	ted)
SIP Proxy	
Prefix	
Prefix match PCRE pattern	
Trim User Phone	
Preferred phone type	
Phone	~
Save	

Figure 23

4. Fill in the fields as follows (see Table 10):

Table 10

Information
SIP server address
The field that adds the specified CTS server IP address to SIP INVITE messages. If the field is not filled, the default value of 127.0.0.1 is used. Example of filling in the field: 10.129.0.9
A field that is transmitted in the invite message towards the ATE. By default, the ccs_host value is added. If necessary, specify the host address from the configuration file
IP Trunk address
Proxy server address
Allowed IP addresses for SIP calls
Prefix value
Substitution template
Phone type for SIP calls: IP phone or other

5. Click "Save".

CONNECTING THE SMTP SERVER

This operation is mandatory when using automatic account creation via e-mail and when creating accounts manually.

The SMTP server is used to send user device authentication PIN codes to e-mail. First, create an account on the mail server under which the letter with the code will be sent.

To connect the SMTP Server:

1. Select "E-mail" from the menu.

The "E-mail Settings" window will open for entering parameters (see Figure 24).



E-mail settings	Test e-mail delivery
Application name	Recipient
From	Send
Server	
Port	
465 Username	
Password	
Password confirmation	
Security	
SSL 🗸	
Send emails via	
Local settings 🗸	
Save	

Figure 24

2. In the "E-mail Settings" window, fill in the fields as follows (see Table 11): Table 11

Field	Description
Field	Description
Application name	The name of the application from which e-mails will be sent
From	Return address
Server	FQDN or IP address of the mail server
Port	Port number for retransmission of outgoing mail: 25, 587 or 465. The port number depends on the type of connection
User name	E-mail address
Password	Data for authorization on the SMTP server. If authentication on the mail server is not used, then leave these fields blank
Password confirmation	Data for authorization on the SMTP server. If authentication on the mail server is not used, then leave these fields blank
Connection protection	Type of secure connection (drop-down list: SSL, Start/TLS or empty value)
Send e-mail via	Drop-down list for selecting a server from which e-mails will be sent (if you select "Local settings" in the drop-down list, e-mails will be sent via the server configured in this window; if you select "RTS", e- mails will be sent via RTS).

3. Click "Save".

To check connection settings, use the "Test E-mail Sending" area. Enter the recipient's address in the empty field and click "Send".

MANAGING USER ACCOUNTS

This section describes the following administrator web interface menu items:

- Setting Up Registration;
- Users;
- Visibility of Profile Fields;
- Activations;


- Instructions to Get Started; ٠
- Locked Out Users; .
- Logout Requests. •

SETTING UP REGISTRATION

The procedure for setting up user registration is described in the document "Administrator's Guide. Installation".

USERS

The section is a table that lists the user accounts registered in the application (see Figure 25).

Use	rs						O Creat	te 🛓 Download as .CSV	full name, contact	search
	AD Login ^ ~	AD E-mail	Domain ^ ~	Full name ^ ~	Sync source ^ ~	Active ~ ~	Туре ^ ~	Company ~ ~	Position ~ ~	
0	13134test@mail.ru	13134test@mail.ru		Tecrosulineers	admin	false	unregistered			1
0	albert.taylor@example.com	albert.taylor@example.com		Albert Taylor	admin	false	unregistered	Leesing Co.	Manager	-

Figure 25

The table consists of the following columns (see Table 12):

Table 12	
Column name	Information
AD login	The identification name of the account in Active Directory. Used when authorizing a user
AD e-mail	Active Directory/OpenID account e-mail
Domain	The domain, on which the account is registered
Name	User name
Source	 Information about the method by which the account was added to the server. The parameter takes the following values: ad (account loaded from Active Directory); admin (an account created by the administrator); botx (chatbot); openid (account loaded via OpenID)
Active	Account status: activated (true) and not activated (false)
Туре	 Account type: cts_user (created and authorized); unregistered (created but not authorized); botx (chatbot)
Company name	The company, with which the user is registered
Position	User position

To download the user table to a file, click of the window.



in the upper right corner

Note. If the file content is not displayed correctly, check the encoding and change it to UTF-8, if necessary.

The following user authorization methods are available (see Table 13):

Table 13		
Authorization method	Account type	Setup Method
Via AD login and password	AD	Specify the NTLM method in registration settings (see page 37)
Via e-mail	AD; Admin	Connect the SMTP server to the CTS server in the "E-mail" section (see "Connecting the SMTP server", page 35), indicate E-mail method in the registration settings (see page 37)
Via OpenID login and password	cts_user	Specify the OpenID method in registration settings (see page 37)

Authorization by AD login and password is available only for accounts added from AD, if the NTLM method is specified in the registration settings.

Authorization by OpenID login and password is available only for accounts added from OpenID, if the OpenID method is specified in the registration settings.

When creating accounts using the administrator web interface, only user authorization via e-mail is supported.

For authorization by e-mail address, connect SMTP server to the CTS server.

OPERATIONS WITH USER ACCOUNTS

The following operations are available to the administrator:

- creating an account;
- editing the created account. The operation is available if the account is not confirmed and activated by the user;
- viewing account information;
- account deletion from the table using the button. The operation is available if the account is not confirmed and activated by the user;
- personalized operations with a specific account.

CREATING AN ACCOUNT

User accounts are displayed in the "Users" section in the form of a table. Accounts are created manually, by creating users in the administrator's web interface in the "Users" section (see the operation below) or automatically in the following ways:

- from Active Directory;
- from OpenID;
- at the stage of registering a new user using e-mail. Using this method will require a preliminary connection to the SMTP server (see section "Connecting the SMTP Server").

To add an account from Active Directory, select the appropriate registration method and configure the settings.

To add an account from OpenID, select the appropriate registration method and configure the settings.

Attention! Integration with Active Directory directory service or directory service with KeyCloak (for OpenID) must be pre-configured. The integration procedure is described in the document "Administrator's Guide. Installation".



Changes made to user accounts in the directory service are automatically synchronized and reflected in the corresponding accounts in Express.

To create an account when registering a user using an e-mail address select the "E-mail" registration method in the "Registration Settings" section and specify the e-mail mask in the "Registration Settings" section and select "E-mail".

To create an account in the administrator web interface:

1. In the upper right corner of the "Users" section, click "Create". The "New User" window will open (see Figure 26).

Create user	😤 List
Public name	
Full name	
E-mail	
Company name	
Company position	
Department	
Office	
Description	
Manager	
IP Phone	
IP Phone (Other)	
Avatar	
Choose File No file chosen	
Save	

Figure 26

2. Fill in the fields of the form.

An example of filling out the form is shown in Figure 27.

Note. The file to be uploaded in the "Avatar" field shall meet the following requirements:

- JPG format;
- file size not more than 100 kb;
- the image shall fit into a 500x500 pixel square.



Create user	😤 List
Public name	
A.Taylor	
Full name	
Albert Taylor	
E-mail	
albert.taylor@example.com	
Company name	
Leesing Co.	
Company position	
Manager	
Department	
Sales	
Office	
222	
Description	
Manager	
IP Phone	
417851-8824	
IP Phone (Other)	
Avatar	
Choose File No file chosen	
Save	

3. Click "Save".

An example of created account display is shown in Figure 28.

User	s						O Creat	e 🛓 Download as .CSV	full name, contact	search
	AD Login ^ ~	AD E-mail	Domain ^ ~	Full name ~ ~	Sync source ^ ~	Active ~ ~	Туре ^ ~	Company ^ ~	Position ~ ~	
0	albert.taylor@example.com	albert.taylor@example.com		Albert Taylor	admin	false	unregistered	Leesing Co.	Manager	1
										۵

Figure 28

For more details on account settings, see the relevant section ("Viewing Account Information").

VIEWING ACCOUNT INFORMATION

Each account has a card containing full information about the account (see Figure 29):

HUID	9992528c-a23b-59f1-bee5-c46abca0fd7a
Public name	A.Taylor
Company	Leesing Co.
Company position	Manager
Office	222
Department	Sales
Manager	
Personnel number	
Business unit	
Personnel category	
Gender	
Birthday	
Description	
RTS ID	
CTS ID	6aeebcc4-5c57-58a3-98b9-38ed2e240884
Key ID	
Active?	false
AD Login	albert.taylor@example.com
Domain	
E-mail	albert.taylor@example.com
Phone	
IP Phone	417851-8824
Sync source	admin
Туре	unregistered
Registration type	default
AD groups	
OpenID roles	
Date of sending the instruction letter	Send instructions
Created at	2025-02-10 08:03:31
Updated at	2025-02-10 08:09:24
Deleted at	

Figure 29

The information in the user card, which was added via AD or OpenID, is for reference only and cannot be edited.

The information in the user card, which was created through the administrator web interface, can be changed. For such a user, buttons for editing data and deleting an account are available (see Figure 30).

Note. The update date of the user's profile changes when the user enters the corporate server or when users are synchronized with the corporate directory.

Users				O Cre	ate 🛓 Dov	vnload as .CSV	name, conta	ct	search
AD Login ~ ~ albert.taylor@example.com	AD E-mail albert.taylor@example.com	Domain ^ Y	Name ^ ~ Albert Taylor	Sync source ~ ~	Active ^ Y	Type ^ ~ unregistered	Company ~ ~ Leesing Co.	Position ~ ~ Manager	





EDITING AN ACCOUNT

Accounts added from Active Directory or OpenID cannot be modified in the administrator web interface. Changes to such accounts are made by synchronizing data with these systems.

If the server allows user avatar changes, the user can change their avatar. Information about this change will be displayed in the list of change requests.

To edit the account:

- 1. Go to the "Users" section (see Figure 30).
- 2. Click 🧖 .

The profile editing window will open (see Figure 31).

Edit profile «Albert Taylor»	
Public name	
A.Taylor	
Full name	
Albert Taylor	
Company name	
Leesing Co.	
Company position	
Manager	
Department	
Sales	
Office	
222	
Description	
Manager	
IP Phone	
417851-8824	
IP Phone (Other)	
Avatar	
Choose File No file chosen	
Save	

Figure 31

3. Make changes and click "Save".



Note. Changing the external user name in an account created in the administrator web interface is available after activating the user account.

OPERATIONS WITH A SPECIFIC USER ACCOUNT

To perform operations with a specific user account, use the buttons on the toolbar (see Figure 32).

🗮 Back to profiles 🛛 Activations 🖉 Blocks 🔍 Keys 🔉 Chats 🖋 Recovering keys in chats 🖋 Edit 🎁 Clean cache 💣 Clean all

Figure 32

The list of available operations:

- return to the "Users" section;
- list of open sessions (activations);
- lockouts;
- keys;
- chats;
- clear cache;
- clear all;
- log out.

To return to the "Users" page, click "Back to profiles".

To view information about lockouts, click "Lockouts".

A window will open with a list of lockouts for the user added from AD (see Figure 33.).

Blocks of «	»		IIII Back to profile
AD Login	Domain	Reason	Created at
		pwd_last_set_changed	2025-02-06 07:50:12
		pwd_last_set_changed	2025-02-06 07:40:11

Figure 33.

The table contains the following information (Table 14):

Table 14

Column name	Information
AD login	The identification name of the account in AD. Used when authorizing a user
Domain	The domain, on which the account is registered
Reason	 Reason for user lockout in AD. The field takes the following values: pwd_last_set_changed (password change); account_disabled (account disabled); lockout (account lock); password_expired (password expired); account_expired (account expired)
Creation date	Lockout creation date. It is entered in the format "year-month-day hour:minutes:seconds"

To view information about open sessions of the registered corporate user, click "Activation".

Each session is represented by an information card (see Figure 34). To view all information cards, scroll down the page.

Device	Chrome 129.0	
Manufacturer	Google	
Platform	web	
Locale	ru	
Active?	false	
UDID		
Created at	2024-11-02 08:59:	05
Updated at	2024-11-06 09:56:	00
App version	3.27.48	
Blocked	false	
Blocked reason		
Device Meta		
permissions.noti	fications	true
pushes		false
timezone		Europe/Moscow
Access token		

Figure 34

The user's active and terminated sessions are displayed in the cards. Each session is identified by UDID and contains information about the user's device, browser version, application version, whether the session was terminated (locked) for any reason, permissions on the device (Device Meta), and time zone Access. The "Device hostname" field displays the DNS Hostname.

Device Meta parameters:

- Permissions.microphone is microphone use allowed;
- Permissions.notifications are notifications allowed in the browser or in the operating system;
- Pushes whether notifications are enabled in the desktop application (web application notifications are managed by the browser) or in the mobile application (iOS application notifications are managed by the operating system);
- Permissions.contacts is access to contacts allowed;
- Permissions.storage is access to device storage allowed.

At the bottom of the card, there are session management buttons:



- "Clear all" clears the chat and contact cache, terminates the session;
- "Clear chats" forcibly clears the chat cache;
- "Clear contacts" forcibly clears the contacts cache.

Note. After clearing the cache, chats/contacts are downloaded again from the server.

To view reference information about the keys assigned to the user, click "Keys". Opens a window with help information (see Figure 35.).

Public keys			i≣ Bacl
	ID Kind Version Created at Updated at Key	cts 1 2024-11-02 08:59:07 2024-11-02 08:59:07	
	ID Kind Version Created at Updated at Key	ed25519 1 2024-11-02 08:59:07 2024-11-02 08:59:07	

Figure 35.

To view the list of chats the user is connected to, click "Chats" (see Figure 36):

Chats	5			search by name, huid
	Name ~ ~	Routing	Chat type ^ ~	Updated at
0	Bolt-personal-Ind	cts	botx	2024-11-02 12:32:21.766283Z
0	Both personal mat	cts	botx	2024-11-02 09:07:52.140262Z
0	angodino, inggo Hooros	cts	chat	2024-11-02 09:07:45.045118Z
1				

Figure 36

The table contains the following information (see Table 15):

Table 15

Column name	Information
Name	Chat name
Routing	 Information about the server on which the chat was created: cts (chat data is stored on the CTS server); rts (chat data is stored on the RTS server); hybrid (chat data is stored on the CTS RTS server)
Chat type	Chat type: • chat (chat); • group_chat (group chat);



Column name	Information
	 channel (channel); botx (chatbot)
Update date	Time of the last event in the chat (message, adding a user, etc.)

Chat names are hyperlinks to the personal chat card.

To clear the cache on all user devices, click "Clear Cache". This method is used when the user cannot clear the device cache on their own or performing the operation on their part does not solve the problems that have arisen.

The "Clear all" button performs similar function – deletes the cache and forcibly returns the user to the authorization window. To enter the application, the user must log in again.

To forcibly disconnect a user from the corporate server, click "Logout". This button is available only in the cards of registered corporate users added via AD and openID. Clicking this button logs the user out of the corporate server. The user can log back in until their account is deleted.

DELETING AN ACCOUNT

Only unregistered accounts created manually and accounts with a confirmed exit request from the CTS server can be deleted in the administrator web interface.

Accounts added from Active Directory or OpenID cannot be deleted in the administrator web interface. Removing accounts from AD is performed by synchronizing data with AD, however accounts are not removed from OpenID.

To delete an account from the table, click and confirm the action in the modal window that opens by clicking "OK". The account will be deleted.

Note. Deleting a user is only possible after he/she logs out of the corporate server.

SETTING UP VISIBILITY OF USER PROFILE FIELDS

The "Visibility of Profile Fields" section (Figure 37) is designed to configure access levels to data in the profile of a registered user of a corporate server.



Profile fields visibility	
Public name	
share to all users	~
Full name	
share to all users	~
Company	
share to all users	~
Position	
share to corporate users only	~
share to corporate users only	`
Avatar	
share to corporate users only	~
Phone	
share to corporate users only	~
Telephone Number (Other)	
share to corporate users only	~
IP Phone	
share to this CTS only	~
IP Phone (Other)	
share to this CTS only	~
E-mail	
share to all users	~
Description	
share to corporate users only	~
Office	
share to trusted CTS only	~
share to trusted CTS only	~
Other ID	
	*
Save	

To set up the visibility of profile fields:

- 1. Go to the "Visibility of Profile Fields" section (see Figure 37).
- 2. Click on the field below the name of the attribute whose data access you want to configure.
- 3. Select one of the access levels from the drop-down list:
 - no one;
 - for users from the same CTS server only;
 - for users from trust CTS servers only;
 - for corporate users only;
 - for all.
- 4. Click "Save".

The configured fields will become available to the specified users. The system message "Profile fields visibility settings saved" will be displayed at the top of the screen.

SETTING UP USER SESSION ACTIVITY TIME

In the "Activations" section, you can set the time in seconds after which the user session on iOS, Android, web, and desktop devices is closed and you are returned to the authorization window.

To set up the user session activity time:

1. Go to the "Activations" section.

The "Activation Settings" window will open with fields for entering parameters (see Figure 38.).

2. Specify the session duration in seconds.

To disable automatic closing of user session, leave the field blank.

3. Click "Save".

Activations Settings	
ios	
Android	
Desktop	
Web 604800	
Save	



SENDING INSTRUCTIONS FOR GETTING STARTED WITH THE APPLICATION

There are two options for sending instructions to the user:

- personally by using a contact card;
- via centralized mailing.

To send the user instructions on how to get started with the application

- 1. Go to the "Users" section and open the account information card.
- 2. Click "Send instructions" (see Figure 39).

The date and time the instruction was sent will be displayed in the line "Date of sending the letter with the instruction".

 Date of sending the instruction letter
 2024-11-11 11:05:13Z
 Send instructions

Figure 39

To set up centralized mailing, go to the "E-mail" \rightarrow "Instructions to Get Started" section (see Figure 40).

This section allows you to create/edit instructions to get started with the application, configure its sending to new users, and also send instructions to all unregistered users.



Getting started instruction	Send to new users G Edit
<u>1234567890</u>	
1234567890	
Send to all unregistered users	
Test e-mail delivery	
Recipient	
Send	

The main part of the window displays the text of the instructions.

To create or change the text of a letter click "Edit" and make changes to the body of the e-mail.

Attention! The body of the e-mail is a mandatory field. If you attempt to send an empty e-mail, a prompt will be displayed in the body of the e-mail saying "Fill in the body of the e-mail (mandatory field)".

To send instructions to all users not registered on the server, click "Send to all unregistered users".

To set up automatic sending of instructions to new users, go to the editing mode and check the box "Send to new users" in the upper right corner of the window.

Note. New users are those that appear in the Users section with the unregistered entry type (for more information on the account type, see Table 12).

The instruction will be sent to the user immediately after they authorize on the corporate server. This option is disabled by default.

To switch to the instruction editing mode, click "Edit" in the upper right part of the window (see Figure 40). A window will open for editing the text of the instructions to get started (see Figure 41).

The tags below the e-mail editing field are used to substitute recipient data and are replaced during mailing with real user names, their corporate e-mail addresses, and corporate server names.

To save your changes, click "Save".

To test the instructions sending feature, enter the recipient's e-mail address in the "Testing e-mail sending" field and click "Send". If the operation is completed successfully, an e-mail with instructions will be sent to the specified address.



Getting started instruction	🖺 Save	Cancel
Subject		
1234567890		
O Normal ÷ B I U ▲ % □ ⋮ ∷ Ξ ⋮ □		
j1234567890		
Wildcard data: #UserName - Full user name #UserMail - Corporate user's email #Corp Server - Corporate server name		
Send to new users		

Figure 41

SENDING NOTIFICATIONS ABOUT USER LOCKOUTS

The "E-mail" section \rightarrow "Locked Out Users" (Figure 42) allows you to configure e-mail notifications about account lockouts.

	3locked users	Send to blocked users C Edit
Test e-mail delivery	ſest e-mail delivery	
Recipient	tecipient	
Send	Send	

Figure 42

The main part of the window displays the text of the notification.

To create or change the text of a letter click "Edit" and make changes to the body of the e-mail.

Attention! The e-mail must contain some text. If you attempt to send an empty e-mail, the administrator will receive the message "Error sending e-mail: you must fill in the body of the e-mail."

To set up automatic sending of notification to new users, go to the editing mode and check the box "Send to new users" in the upper right corner of the window. The notification will be sent to the user immediately after they authorize on the corporate server. This option is disabled by default.

To go to the editing mode, click "Edit" in the top right corner. A window will open for editing the text of the user lockout notification (see Figure 43).

To save your changes, click "Save".



Blocked users	🖺 Save	Cancel
Subject		
⑦ Normal * B I U ▲ % 교 등 등 등		
Wildcard data: #UserName - Full user name #UserMail - Corporate user's email #CorpServer - Corporate server name		
Send to blocked users		

To test the user lockout notification sending feature, enter the recipient's email address in the "Testing e-mail sending" field and click "Send". Once the operation is completed successfully, an e-mail with notification will be sent to the specified address.

REQUESTS TO EXIT FROM THE CORPORATE SERVER

Logging out users from a corporate server can be carried out as follows:

- a logout request made by the user in the client application and confirmed by the administrator;
- by clicking the "Logout" button on the toolbar in the user card in the administrator web interface (see "Operations with a Specific User Account").

Once the user logs out of the corporate server, the button to delete the user from the corporate server becomes available (see "Deleting an Account").

When the user clicks the "Logout" button in the "Profile" section of application settings, the application sends a logout request to the CTS server.

Requests are displayed Table in the "Logout Requests" menu item (see Figure 44.).

Log	Out list Accept all	Reject all				Search by name	Search by login	✓ I Back to profiles
	Name ~ ~	AD login ~ ~	Domain ~ ~	Company ~ ~	Company position ^ ~	Reason ~ ~	Created at ~ ~	
	Orapp Mecores	Solar manufax	indial organic rea			admin_request	2024-11-07 07:50:39Z	Reject Accept

Figure 44.

The parameters of registered displayed requests are shown in the following table (Table 16):

Table 16

Column name	Information
Name	User name
AD login	The identification name of the account in Active Directory. Used when authorizing a user
Domain	The domain, on which the account is registered



Column name	Information
AD e-mail	Active Directory/OpenID account e-mail
Company name	The company, with which the user is registered
Position	User position
Reason	Reason for logout
Creation date	Date of creation of the logout request

The reasons for the logout request are shown in the following table (Table 17):

Table 17 Event Description user request The logout request was sent by the user Logout due to password change in AD pwd_last_set_changed account disabled The user's account has been disabled in AD account deleted The user's account has been deleted The user has been locked out in AD lockout The user's AD password has expired password_expired account_expired The user's account in AD has expired admin_request Logout request was sent by the administrator excluded_from_search_filter The autologout option was enabled and the user was not included in the sample (removed from the AD group)

To search for requests in the table, use fields at the top of the window (see Figure 45.).

Logout list Accept all Search by login 🗸 🖉 Back to profiles

Figure 45.

Search types:

- search by user name search is performed by user's name in the system;
- search by login search is performed by user's login in the system;
- Search by reason the reason for the logout request is selected in the dropdown list.

Note. The button to mark all users to the left of the "Name" column is only active if the search is activated due to a logout request. If no filter is selected, you can only mark users one by one.

To confirm the user's request, click "Accept" and confirm the action by clicking "OK" in the modal box that opens.

To confirm several requests at the same time, check the names of the required users and click "Accept all" and confirm the action by pressing "OK" in the modal window that opens. If necessary, use the search function.

To reject the user's request, click "Reject" and confirm the action by clicking "OK" in the modal box that opens.

To reject several requests at the same time, check the names of the required users and click "Reject all" and confirm the action by pressing "OK" in the modal window that opens. If necessary, use the search function.

To remove a user whose logout request has been confirmed from the CTS

server, go to the "Users" section, click ¹ on the right in the user's entry line, and confirm the action by clicking the "OK" button in the modal window that opens.



To forcefully remove a user from the CTS server:

- 1. Select the "Users" menu item.
- 2. In the table, select a contact and open the contact card.
- 3. On the toolbar, click "Logout".
 - A request will be displayed in the "Logout Requests" menu item.
- 4. Open the "Logout Requests" menu item and click "Accept" next to the username.

LIST OF CHANGE REQUESTS

Changing user data on the corporate server can be performed by a change request made by the user himself in the client application and confirmed by the administrator.

When a user changes data in the application settings in the Profile section, the application sends a request to CTS.

Requests are displayed Table in the "List of Change Requests" menu item (see Figure 46.).

Profile	e change request list Accept selecte	d Reject selected			
	AD login ^ ~	Domain ^ Y	Avatar	Created at ~ ~	
	AD_Login_For_User		(2025-02-10 13:44:10	Reject Accept

Figure 46.

The parameters of registered displayed requests are shown in the following table (Table 18):

Table 18

Column name	Information
AD login	The identification name of the account in Active Directory. Used when authorizing a user
Domain	The domain, on which the account is registered
Avatar	User avatar
Creation date	Date of creation of the change request

To search for requests in the table, use fields at the top of the window (see Figure 46.). User search is performed by the user's login in the system.

To confirm the user's request, click "Accept" and confirm the action by clicking "OK" in the modal box that opens.

To confirm several requests at the same time, check the names of the required users and click "Accept all" and confirm the action by pressing "OK" in the modal window that opens. If necessary, use the search function.

To reject the user's request, click "Reject" and confirm the action by clicking "OK" in the modal box that opens.

To reject several requests at the same time, check the names of the required users and click "Reject all" and confirm the action by pressing "OK" in the modal window that opens. If necessary, use the search function.



SUPPORT CONTACTS

In this section, you can configure the methods by which the user can contact eXpress Customer Support, as well as download a file with frequently asked questions to the user's device.

To set up support contacts:

- 1. Check/uncheck the box "Display eXpress support contacts".
- 2. Fill in the fields of the form (see Figure 47).

Support Info	
Show eXpress Support Contacts	
Phone	
Email	
Telegram	
Whatsann	
amarsahh	
Save	
FAQ RU	Show FAQ
Choose File No file chosen	
FAQ EN	Show FAQ
Choose File No file chosen	
0	

Figure 47

3. Click "Save".

To upload a file with instructions, in the "Support Settings" section of the client's administrator panel, click "Select File" (in Russian or English), select a file in .html format from the file system and click "Save".

To view the text of the instructions, click "View FAQ".

ROLE MODEL AND USER GROUPS

This section describes the following administrator web interface menu items:

- Role Model;
- User Groups.

Within the framework of the role model for individual user groups, the administrator can set restrictions for Express ("In messenger") and its SmartApps ("In SmartApps"):

Table 19

Rule	Scope			
	In messenger	In SmartApps		
Prohibition of sending/forwarding attachments to chats;	\checkmark	~		
Prohibition of downloading/viewing attachments in chats;	\checkmark	~		
Prohibition of the ability to forward/share/save attachments to the device's memory	~	~		
Prohibition of downloading attachments from CTS users;	~	×		



Rule	Scope		
	In messenger	In SmartApps	
Mandatory use of the PIN code when the user enters the application.	\checkmark	\times	

Restrictions may apply to:

- attachment type (image, video, document);
- document format (e.g. PDF, DOCX, TXT, etc.);
- attachment size (for example, 300 MB);
- specific chats/channels;
- discussions and chats of calls/conferences;
- users.

First, the administrator creates user groups in the User Groups section to which the restrictions will apply, and then, in the Role Model section, sets the rules that the restrictions will be subject to.

Restrictions can be configured for specific users or specific groups based on server affiliation.

OPERATIONS WITH USER GROUPS

In the "User Groups" section (Figure 48), the following functionality is available to the administrator:

- creating a group;
- editing parameters of the group;
- deleting a group.

User groups	Create new group
Enter query Group name	Search
1	✓ Ü
Test_Group_1	e 11

Figure 48

To create a new group:

 Go to the "User Groups" section and click "Create New Group". The group settings form will open (see Figure 49).



Create new group
Group name
Enter name
Platform Android Desktop Web IOS
Connection Type
Select connection type
Add users
Ad groups
Enter AD groups
Openid roles
Enter OpenID roles
Profile fields
Select a position
Select a company
Select a department
Select a domain
Specific users
Enter huid, email, name or ad login
± Upload a users list
Excluded users
Specify users who will be excluded from the group
▲ Upload list of excluded users
Create group

2. Fill in the fields of the form. Field values are shown in Table 20.

Table 20

Column name	Information
Group name	Group name (mandatory field)
Platform	Platforms for which the restriction will apply (the field is mandatory)
Connection type	Select the connection type from the drop-down list (mandatory field). The division into "External contour" and "Internal contour" works on the basis of contour settings in the "File Service" section. In order the CTN settings to not interfere with the operation of the role model, turn on the contour (check "Enabled"), in all the settings fields of the contour rules, specify "any" and specify the IP masks of your corporate network
AD group	Specify AD user groups
OpenID roles	Specify OpenID user roles
Profile field	Enter user's profile data
Specific users	Specify user's HUID, e-mail, name or AD login. Download the user list if necessary
Exception users	Specify the users that will not be subject to the rule. Download the user list if necessary



3. Click "Create Group".

To edit a user group:

1. Select a group from the list (Figure 50) and click "Edit" .

User groups	Create new group
Enter query Group name	Search
1	۶ ۵
Test_Group_1	1

Figure 50

The "Edit	Group"	window	will o	pen (Figure	51)):
-----------	--------	--------	--------	-------	--------	-----	----

Edit group
Group name
Test_Group_1
Platform Android Z Desktop 🗌 Web 🗌 iOS
Connection Type
External 🗸
Add users
Ad groups
Enter AD groups
Openid roles
Enter OpenID roles
Profile fields
Select a position
Select a company
Select a department
Select a domain
Specific users
Enter huid, email, name or ad login
± Upload a users list
Excluded users
Specify users who will be excluded from the group
▲ Upload list of excluded users
Save group

Figure 51

2. Make changes and click "Save Group".

ROLE MODEL

In this section, the administrator can activate the role-based access restrictions model. Restrictions on user actions with attachments and the use of a PIN code are regulated by the created rules. By default, the section is not activated. The page contains a list of rules (see Figure 52.).

To view the list of rules, open the corresponding section by clicking . Active rules have the status of "Activated". The rules that have not been applied have the "Paused" status. After creation, all rules have the "Paused" status.

Attention! To start applying the rule, select the "Activated" status from the rule status dropdown list.

Role Model Role model activated The activated rules apply	Enter query	클프 Search	Create new rule
Chats			
Sending/forwarding attachments is not allowed			~
Downloading/viewing attachments is not allowed			\checkmark
Forwarding/sharing/saving attachments to device memory is not allowed			~
Recipients are not allowed to download attachments from cts users			\vee
Require pin			~
Smartapps			
Sending/forwarding attachments is not allowed			~
Downloading/viewing attachments is not allowed			\vee
Forwarding/sharing/saving attachments to device memory is not allowed			\checkmark

Figure 52.

OPERATIONS WITH RULES

The administrator can create, copy, edit and delete rules.

CREATING GENERAL RULES

This section describes the rules that apply both in the "In Messenger" and the "In SmartApp" scopes.

Attention! The drop-down list of restrictions changes depending on the selected scope. When you select the "In messenger" scope, additional rules will appear in the list.

Creating rules:

- prohibition of sending/forwarding attachments to chats;
- prohibition of downloading/viewing attachments in chats;
- prohibition of the ability to forward/share/save attachments to the device's memory.

To create a rule:

1. Click "Create New Rule".

The rule creation form will open (see Figure 53).

tule name	
Enter name	
Rule description	
Enter description	
lser groups	
Select from existing user groups or create new ones on the User Groups tab	
cope	
Messaging	~
Rule action	
	~
Downloading/viewing attachments is not allowed	
Downloading/viewing attachments is not allowed Restriction conditions Attachment Type Select attachment type	
Downloading/viewing attachments is not allowed Restriction conditions Attachment Type Select attachment type	~
Downloading/viewing attachments is not allowed Restriction conditions Attachment Type Select attachment type Restriction target fron field is selected, the restriction will be applied globally. If at least one field is selected, th	✓ e restriction will
Downloading/viewing attachments is not allowed Restriction conditions Attachment Type Select attachment type Restriction target f no field is selected, the restriction will be applied globally. If at least one field is selected, th apply only within the specified assignments.	• restriction will
Downloading/viewing attachments is not allowed Restriction conditions Attachment Type Select attachment type Restriction target If no field is selected, the restriction will be applied globally. If at least one field is selected, th apply only within the specified assignments. Select users whose presence in the chat prohibils the action	e restriction will
Downloading/viewing attachments is not allowed Restriction conditions Attachment Type Select attachment type Restriction target f no field is selected, the restriction will be applied globally. If at least one field is selected, th apply only within the specified assignments. Select users whose presence in the chat prohibits the action Select the chat type to be restricted	e restriction will
Downloading/viewing attachments is not allowed Restriction conditions Attachment Type Select attachment type Restriction target If no field is selected, the restriction will be applied globally. If at least one field is selected, th apply only within the specified assignments. Select users whose presence in the chat prohibits the action Select the chat type to be restricted Select users whose attachments are restricted	e restriction will
Downloading/viewing attachments is not allowed Restriction conditions Attachment Type Select attachment type Restriction target If no field is selected, the restriction will be applied globally. If at least one field is selected, th apply only within the specified assignments. Select users whose presence in the chat prohibits the action Select the chat type to be restricted Select users whose attachments are restricted Enter the maximum file size (MB)	e restriction will
Downloading/viewing attachments is not allowed Restriction conditions Attachment Type Select attachment type Restriction target If no field is selected, the restriction will be applied globally. If at least one field is selected, th poly only within the specified assignments. Select users whose presence in the chat prohibits the action Select users whose presence in the chat prohibits the action Select users whose attachments are restricted Enter the maximum file size (MB) Exception chats	e restriction will

The presence of form fields depends on the attachment type.

2. Fill in the fields of the form. Field values are shown in Table 21.

Table 21

Column name	Information
Rule name	Rule name (mandatory field)
Rule description	Description of the restriction action (maximum 1,000 characters)
User group	Select the user groups from the drop-down list
Scope	Select the scope "In Messenger" or "In SmartApps" from the drop-down list
Rule type	Select the rule type from the drop-down list (mandatory field)
Attachment type	Select the attachment type from the drop-down list (mandatory field)
Prohibition function	 Select the following from the drop-down list: users whose presence in the chat disallows an action; type of chat that falls under a prohibition; enter the maximum allowable file size (MB); specify the list of prohibited file extensions (for documents)
Exception chats	Specify the IDs of chats that will not be subject to the rule

Attention! If no fields are filled in the prohibition function, the prohibition will apply to all chats. If at least one field is filled in, prohibition will be applied only the specified assignments.

3. Click "Create Rule".

The rule will be displayed in the list in the corresponding restrictions section (see Figure 52.).

CREATING AN "IN MESSENGER" RULE

This section describes the rules that apply only in the "In messenger" scope.

PROHIBITION OF DOWNLOADING ATTACHMENTS FROM CTS USERS;

To create a rule:

1. Click "Create New Rule".

The rule creation form will open (see Figure 54).

Rule name	
Enter name	
Rule description	
Enter description	
User groups	
Select from existing user groups or create new ones on the User Groups t	ab
Scope	
Messaging	~
Rule action	
Rule action Recipients are not allowed to download attachments from cts users	~
Rule action Recipients are not allowed to download attachments from cts users Restriction conditions	~
Rule action Recipients are not allowed to download attachments from cts users Restriction conditions Attachment Type	~
Rule action Recipients are not allowed to download attachments from cts users Restriction conditions Attachment Type Select attachment type	~
Recipients are not allowed to download attachments from cts users Restriction conditions Attachment Type Select attachment type Restriction target	•
Rule action Recipients are not allowed to download attachments from cts users Restriction conditions Attachment Type Select attachment type Restriction target Select contour	· · · · · · · · · · · · · · · · · · ·
Rule action Recipients are not allowed to download attachments from cts users Restriction conditions Attachment Type Select attachment type Restriction target Select contour Select the users for whom the action will be restricted	· · · · · · · · · · · · · · · · · · ·
Rule action Recipients are not allowed to download attachments from cts users Restriction conditions Attachment Type Select attachment type Restriction target Select contour Select the users for whom the action will be restricted Select the chat type to be restricted	· · · · · · · · · · · · · · · · · · ·

Figure 54

2. Fill in the fields of the form. Field values are shown in Table 22.

Table 22

Column name	Information
Rule name	Rule name (mandatory field)
Rule description	Description of the restriction action (maximum 1,000 characters)
User group	Select the user groups from the drop-down list
Scope	Select the scope "In Messenger" from the drop-down list
Rule type	Select the rule type "Prohibition for recipients to download attachments from CTS users" from the drop-down list
Attachment type	 Select the attachment type from the drop-down list (mandatory field): video files; documents; images



Column name	Information
Prohibition function	 Choose a contour delineation from the drop-down list: "Everyone, except for users from the internal contour" (prohibition for all CTN users, except users from the same server); "Everyone, except for users from the trusted contour" (prohibition for all CTN users, except for users from the same server and trust servers). Attention! For more information about setting up contour access, see page 108. Choose from the drop-down list of users for whom the action will be prohibited: "Everyone, except for users from the trusted servers" (prohibition for everyone, except for users from the same server and trust servers). "Everyone, except for users from the same server" (prohibition for everyone, except users from the same server" (prohibition for everyone, except users from the same server); "Public users and guests" (prohibition for "green" users and guests). Attention! At least one of the specified purposes must be filled. If both purposes are filled, the most stringent one — the contour restriction — will apply. Select the type of chat for which the prohibition is configured from the drop-down list: "Only group chats and channels without end-to-end encryption"; "Only group chats and channels with end-to-end encryption"; "Only personal chats".
Exception chats	Specify the IDs of chats that will not be subject to the rule

3. Click "Create Rule".

The rule will be displayed in the list in the corresponding restrictions section (see Figure 52.).

MANDATORY PIN CODE SETTING

The rule obliges the user to set a PIN code to enter the app. After setting a PIN code, the user will not be able to turn it off.

To create a rule:

1. Click "Create New Rule".

The rule creation form will open (see Figure 55).

Enter name	
tule description	
Enter description	
lser groups	
Select from existing user groups or create new ones on the User Groups tab	
icope	
Messaging	
tule action	
Require pin	
configuration of mandatory PIN code is only available on ios/android/deskton	





2. Fill in the fields of the form. Field values are shown in Table 23.

Table 23

Column name	Information
Rule name	Rule name (mandatory field)
Rule description	Description of the restriction action (maximum 1,000 characters)
User group	Select the user groups from the drop-down list (mandatory field)
Scope	Select the scope "In Messenger" from the drop-down list
Rule type	Select the rule type "Mandatory PIN code" from the drop-down list

Note. The rule for setting a mandatory PIN code applies only to iOS/Android/Desktop.

3. Click "Create Rule".

The rule will be displayed in the list in the corresponding restrictions section (see Figure 52.).

COPYING RULES

To copy a rule:

1. Select a rule from the list and click $\overset{@}{@}$.

A window for creating a copy of the selected rule will open. The word "Copy" will be added to the beginning of the rule name (see Figure 56).

Rule name		
Enter name		
Rule description		
Enter description		
User groups		
Select from exis	ing user groups or create new ones on the User Groups tab	
Scope		
Messaging		,
Rule action		
E a superdia a falsa	ing/saving attachments to device memory is not allowed	,
Restriction	conditions	
Restriction Attachment Type Select attachme	conditions	
Restriction Attachment Type Select attachme Restriction targe If no field is select apply only within ti	conditions nt type d, the restriction will be applied globally. If at least one field is selected, the restriction e specified assignments.	wil
Attachment Type Select attachme Restriction targe If no field is select apply only within ti Select users wf	nt type d, the restriction will be applied globally. If at least one field is selected, the restriction e specified assignments. ose presence in the chat prohibits the action	will
Restriction Attachment Type Select attachme Restriction targe If no field is select If no field is select Select users wi Select the chat	econditions In type In type In type In the restriction will be applied globally. If at least one field is selected, the restriction e specified assignments. See presence in the chat prohibits the action ype to be restricted	will
Restriction Attachment Type Select attachme Restriction targe If no field is select apply only within th Select users wf Select users wf	conditions In type Id, the restriction will be applied globally. If at least one field is selected, the restriction e specified assignments. Ose presence in the chat prohibits the action ype to be restricted ose attachments are restricted	will
Restriction Attachment Type Select attachme Restriction targe fron field is select apply only within th Select users wf Select users wf Enter the maxim	conditions nt type d, the restriction will be applied globally. If at least one field is selected, the restriction e specified assignments. ose presence in the chat prohibits the action ype to be restricted ose attachments are restricted um file size (MB)	will
Restriction Attachment Type Select attachme Restriction targe thro field is select apply only within th Select users wf Select users wf Enter the maxim Exception chats	nt type d, the restriction will be applied globally. If at least one field is selected, the restriction e specified assignments. ose presence in the chat prohibits the action ype to be restricted ose attachments are restricted um file size (MB)	will
Restriction Attachment Type Select attachme Restriction targe thro field is select apply only within th Select users wf Select users wf Enter the maxim Exception chats Specify the IDS	conditions nt type d, the restriction will be applied globally. If at least one field is selected, the restriction e specified assignments. ose presence in the chat prohibits the action ype to be restricted ose attachments are restricted um file size (MB) if chats that will not be affected by the rule	will

Figure 56

- 2. Make the necessary changes to the fields of the form.
- 3. Click "Save Rule" at the bottom of the form.



EDITING RULES

To edit a rule:

1. Select a rule from the list and click 🖉.

The form for editing a previously created rule will open (see Figure 57).

Rule name	
12344	
Rule description	
Enter description	
User groups	
Select from existing user groups or create new ones on	the User Groups tab
1 🗙	
Scope	
Messaging	~
Rule action	
Downloading/viewing attachments is not allowed	~
Restriction conditions	
Restriction conditions Attachment Type Document	
Restriction conditions Attachment Type Document Restriction target If no field is selected, the restriction will be applied globall anolv only within the specified assignments	, If at least one field is selected, the restriction will
Restriction conditions Attachment Type Document Restriction target If no field is selected, the restriction will be applied globall apply only within the specified assignments. Everyone except users from trust servers	r. If at least one field is selected, the restriction will
Restriction conditions Attachment Type Document Restriction target If no field is selected, the restriction will be applied globalt apply only within the specified assignments. Everyone except users from trust servers Only group chats and channels without end-to-end end	. If at least one field is selected, the restriction will
Restriction conditions Attachment Type Document Restriction target If no field is selected, the restriction will be applied globall apply only within the specified assignments. Everyone except users from trust servers Only group chats and channets without end-to-end enco Select users whose attachments are restricted	r. If at least one field is selected, the restriction will yption
Restriction conditions Attachment Type Document Restriction target If no field is selected, the restriction will be applied globall apply only within the specified assignments. Everyone except users from trust servers Only group chats and channels without end-to-end end Select users whose attachments are restricted Enter the maximum file size (MB)	. If at least one field is selected, the restriction will yption
Restriction conditions Attachment Type Document Restriction target If no field is selected, the restriction will be applied globall apply only within the specified assignments. Everyone except users from trust servers Only group chats and channels without end-to-end enco Select users whose attachments are restricted Enter the maximum file size (MB) pdf bxt	r. If at least one field is selected, the restriction will yption
Restriction conditions Attachment Type Document Restriction target If no field is selected, the restriction will be applied globall apply only within the specified assignments. Everyone except users from trust servers Only group chats and channels without end-to-end end Select users whose attachments are restricted Enter the maximum file size (MB) pdf txt Lypload restricted extensions	r. If at least one field is selected, the restriction will yption
Restriction conditions Attachment Type Document Restriction target If no field is selected, the restriction will be applied globall apply only within the specified assignments. Everyone except users from trust servers Only group chats and channels without end-to-end end Select users whose attachments are restricted Enter the maximum file size (MB) pdf txd 2. Upload restricted extensions Exception chats	v. If at least one field is selected, the restriction will yption v
Restriction conditions Attachment Type Document Restriction target If no field is selected, the restriction will be applied globalt apply only within the specified assignments. Everyone except users from trust servers Only group chats and channels without end-to-end end Select users whose attachments are restricted Enter the maximum file size (MB) pdf txt Lupload restricted extensions Exception chats Specify the IDs of chats that will not be affected by the interval	. If at least one field is selected, the restriction will yption ule

Figure 57

- 2. Make the necessary changes to the fields of the form.
- 3. Click "Save Rule" at the bottom of the form.

DELETING RULES

To delete a rule, select it from the list, click $\stackrel{\text{(i)}}{=}$ and confirm the action in the modal window that opens by clicking "OK".

MANAGING ADMINISTRATOR ACCOUNTS

This section describes the following administrator web interface menu items:

- Administrators;
- Authentication of Administrators.

Administrator accounts are managed in the "Administrators" section. This section allows you to perform the following operations:

- create administrator accounts;
- edit administrator account details;
- lock out administrator accounts;
- delete administrator accounts;
- create, edit and delete administrator groups;
- configure administrator group rights.

A complete list of administrators is provided in the "Administrators" menu item (see Figure 58).

Administrators EList groups of					reate				
Login ~ ~	Source	Full name	Phone	E-mail	Address	Group	Created at ^	Updated at ^ ~	
	admin					su	2023-12-25	2023-12-25	di
							12:44:33	12:44:33	8
	admin					su	2024-10-10	2024-10-10	
							07:55:40	07:58:25	B
	admin					su	2023-12-25	2023-12-25	
							14:16:24	14:16:24	ū
	admin					Administrators	2025-01-15	2025-01-15	1
							12:11:30	12:11:30	Û

Figure 58

The table with the list of administrators contains the following information (see Table 24):

Table 24

Column name	Information
Login	The identification name of the account in \ensuremath{Active} Directory. Used when authorizing a user
Full name	Administrator's full name
Phone	Administrator's contact phone number
E-mail	Administrator's contact e-mail address
Address	Administrator's physical address
Group	The group to which the administrator belongs
Creation date	Account creation date
Update date	Date the account was last updated

CREATING ADMINISTRATOR ACCOUNTS

The administrator web interface implements two methods for creating administrator accounts: loading a generated group of accounts from AD and creating them using the web interface.



To create an administrator account manually:

- 1. Select the "Administrators" menu item.
- 2. In the upper right corner, click "Create".

The "Add Administrator" window will open (Figure 59):

Create auministrator	f Lis
Login	
Password	
Password confirmation	
Group	
Administrators	
Enable block	
Block at	
11/13/2024	

Figure 59

3. Fill in the fields of the form.

In the "Group" block, select the groups that the created administrator account will belong to.

4. Click "Save".

The message "Administrator account saved" will be displayed at the top of the window.

5. Fill in/edit the form fields in the next window and click "Save" (see Figure 60).

Group		
Administrators		
✓ su		
First name		
Second name		
Last name		
Phone		
E-mails (comma separated)		
Address		
Save		
Password		
Password confirmation		
Decet password		
Reset passworu		

Figure 60

To set up loading of administrator accounts from AD:

1. Go to the "Administrator Authentication" section (see Figure 61).



2. Configure the settings as shown in Table 25.

The parameter values are provided by the Active Directory administrator.

Table 25

Parameter	Description
Address	Active Directory address
Port	AD connection port
Base DN	Directory object from which the search is performed
Search filter	Filter for searching in Active Directory
Administrator login	Login of the user who has read access to the list of users at the specified DN
Administrator password	Password of the user who has read access to the list of users at the specified DN
Password confirmation	Confirmation of the password of the user who has read access to the list of users at the specified DN

To enable/disable authentication of Active Directory administrators, check/uncheck "Enabled".

To test the connection to Active Directory, click "Test Connection".

After clicking on the "Show administrators" button, a list of Active Directory administrators is displayed.

SETTING UP ADMINISTRATOR RIGHTS

Role-based division of rights in eXpress CS is implemented by combining administrators into different groups. Each group of administrators has its own set of rights.

To create a group:

- 1. Select the "Administrators" menu item.
- 2. In the upper right corner, click "Show Groups".

A window will open with a list of all groups and their rights – "Groups" (Figure 62):



	active directory with	
54 / /.	E-mail: Getting started instruction: write	/
	Stickers: write	
	transcoding tasks write	
	USERS WITH	
	file service write	
	Role Model: with	
	Ionut list wife	
	open_chats; write	
	links to chatscalls, write	
	Global hots' write	
	contributer with	
	Chate with	
	Drafts mill	
	E-mit units	
	E-mail. mile	
	montaine suite mite	
	ettaliste vinto	
	anamatria, mini	
	activers, while	
	E-mail: Blocked user: with	
	E-minit, Brocked Maris, Wille	
	ANDIA THIC	
	Grubar units	
	Dots. Wile	
	Caris, while	
	Administrators: wile	
	External Osers: whe	
	Corporate Directory: wine	
	Administrators authentication: write	
	Support Info: write	
	Audit settings: write	
	VORX: WITE	

3. In the upper right corner, click "Create".



A window for creating a group and setting its rights will open (Figure 63):

me			
AP Group			
Permissions:			
active_directory	no	read	write
E-mail: Getting started instruction	no	read	write
Stickers	no	read	write
transcoding_tasks	no	read	write
users	no	read	write
file_service	no	read	write
Role Model	no	read	write
logout_list	no	read	write
open_chats	no	read	write
Links to chats/calls	no	read	write
Global bots	no	read	write
containers	no	read	write
Chats	no	read	write
Profile fields visibility	no	read	write
E-mail	no	read	write
Internal bots	no	read	write
SmartApps	no	read	write
statistics	no	read	write
servers	no	read	write
activations	no	read	write
E-mail: Blocked users	no	read	write
Audit	no	read	write
server	no	read	write
Global Chat	no	read	write
bots	no	read	write
Calls	no	read	write
Administrators	no	read	write
External Users	no	read	write
Corporate Directory	no	read	write
Administrators authentication	no	read	write
Support Info	no	read	write
Audit settings	no	read	write
voex	no	read	write





The rights buttons have the following meanings:

- No the administrator does not have access rights to the menu item;
- read the administrator can only view the information in the menu item;
- Write the administrator can view the information in the menu item and make changes to it.
- 4. In the "Name" field, enter the name of the group.
- 5. In the "LDAP Group" field, the name of the administrator group in AD can be specified.

If the administrators of the group being created or edited are members of the specified group in Active Directory, they will receive the rights of the corresponding AD group.

- 6. In the "Rights" section, set access rights for the group.
- 7. Click "Save".

The created group will be displayed in the "Groups" window.

To edit a group, click \checkmark . Make changes in the window that opens and click "Save".

The list of administrator rights is presented in Table 26.

Table 26

Menu item name	Rights		
	NO	READ	WRITE
Activations	No access to the section	Viewing user session active time settings	Changing user session active time settings
Audit	No access to the section	Viewing audit events	Viewing audit events
E-mail: Instructions to Get Started	No access to the section	Viewing the instructions to get started with the application. Testing e-mail sending	Changing the instruction to start working with the application. Enable/disable the e-mail sending function. Testing e-mail sending
Links to chats/calls	No access to the section	Viewing settings:links host;access type	 Changing settings: links host; access type. Enabling/disabling the ability to generate links for guest users.
Global Bots	No access to the section	Viewing the list of global bots	Adding global bots to the global chat. Removing global bots from global chat
Call Recording	No access to the section	Enabling a filter by record type:	Enabling a filter by record type:
Stickers	No access to the section	View information about sticker packs	Creating, deleting sticker packs Managing sticker packs settings



Menu item name	Rights		
	NO	READ	WRITE
Internal Bots	No access to the section	Viewing the list of internal bots	Changing and setting up internal bot Adding a bot administrator
Server	No access to the section	 Viewing settings: corporate server; authorization notifications. Viewing the corporate address book search enable/disable indicator. Viewing validity periods: TLS certificates of trusts; SSL certificates of bot platform. Viewing service versions 	 Changing settings: corporate server; authorization notifications. Enabling/disabling corporate address book search Addition and removal: TLS certificates of trusts; SSL certificates of chatbots platform. Viewing service versions
Calls	No access to the section	 Viewing: viewing the list of calls and conferences; viewing information about the chat in which the call was made; viewing information about the call; downloading a call, conference log 	Terminating a call, conference Deleting all call logs
SmartApps	No access to the section	Viewing SmartApp settings	Changing SmartApp display settings in the main menu
Chats	No access to the section	Viewing:the list of chats;chat users	Converting a closed chat to an open chat. Adding users to chat
Support Contacts	No access to the section	Viewing attached files	Viewing and editing attached files
Global Chat	No access to the section	Viewing global chat settings	Enabling and disabling global chat. Setting Up Global Chat Settings
Authentication of Administrators	No access to the section	Viewing administrator authentication settings	Changing administrator authentication settings
Setting up Web and Desktop clients menus	No access to the section	Viewing menu configuration settings for web and desktop applications	Changing menu configuration settings for web and desktop applications
Logout Requests	No access to the section	Viewing the list of user logout requests	Accepting and rejecting user logout requests
E-mail	No access to the section	 Viewing: mail server settings; test recipient e-mail addresses 	 Changing: mail server settings; test recipient e-mail address. Testing e-mail sending
Role Model	No access to the section	Viewing the list of rules	Creating, editing, copying, and deleting a rule. Changing the status of a rule. Enabling/disabling the role model



Menu item name	Rights		
	NO	READ	WRITE
Open Chats	No access to the section	Viewing information about open chats and channels	 Creating an open chat. Deleting an open chat. Adding contacts to chat. Conversion: open chat to closed chat; closed chat to open chat Granting/removing administrator rights from a user
Users of external systems	Item under develo	ppment	
Statistics	No access to the section	Viewing application performance statistics	Viewing application performance statistics
Active Directory	No access to the section	Viewing AD connection settings	 Changing AD settings: Connections to AD; user registration – via SMS/e-mail
Servers	No access to the section	Viewing configured trusts	Connecting and changing trust settings
Change of their password by the administrators	No access to the section	View of their profile by the administrator	Change of their profile by the administrator
Mobile client menu configuration	No access to the section	View of mobile application menu configuration settings	Change of mobile application menu configuration settings
Containers	No access to the section	Viewing Docker containers lists and logs	Viewing Docker containers lists and logs
Corporate directory	No access to the section	View a list of open corporate chats, channels and chatbots	Managing the display of the chat directory "showcase": sorting the list of open corporate chats, channels and chatbots
VoEx	No access to the section	Viewing TURN server settings	Changing TURN server settings
Bots	No access to the section	Viewing the list of bots	Creating, editing and deleting chatbots
Users	No access to the section	 Viewing: user list; account settings; open user sessions; user lockouts; public keys; chats in which the users are participants 	Create an account. Changing an account created in the administrator web interface. Deleting an account created in the administrator web interface, or if a logout request has been accepted
Administrators	No access to the section	Viewing:list of administrators;administrator groups	Creating, editing and deleting administrators. Setting Up Administrator Rights
Visibility of Profile Fields	No access to the section	Viewing data access settings in a corporate server user profile	Setting up data access levels in a corporate server user profile
E-mail: Locked Out Users	No access to the section	Viewing user lockout notification Testing e-mail sending	Changing user lockout notification. Enable/disable the notification sending function. Testing e-mail sending



Menu item name	Rights			
	NO	READ	WRITE	
File Service	No access to the section	Viewing settings:network contour on the CTS server;deletion of files on the hard drive	 Changing settings: network contour on the CTS server; deletion of files on the hard drive 	
Audit Settings	No access to the section	Viewing security event information transmission settings	Enable/disable sending of information about security events to the SIEM of the information system into which eXpress is integrated	

To delete a group, click ^(a). The button will be unavailable, if the group contains at least one administrator account.

EDITING ADMINISTRATORS

There are two ways to edit the administrator account.

FIRST METHOD

To edit the administrator account:

- 1. Select the "Administrators" menu item.
- 2. Click opposite the account name.

A window with administrator profile settings will open (Figure 64):

Administrator	
Group	
] test	
Administrators	
🖌 su	
First name	
Second name	
_ast name	
Phone	
E-mails (comma separated)	
Address	
Save	
Password	
Password confirmation	

Figure 64

3. Make the necessary changes to the fields.

Note. The administrator can be a member of several groups. To select groups, check the appropriate options in the "Groups" field.

4. Click "Save".


SECOND METHOD.

To edit the administrator account:

1. Tap on \checkmark in the upper left part of the window (Figure 65).

expre	
user@server.ru	/ 0

Figure 65

If "write" is set in the "Administrators" item of the administrator rights settings, the window with the administrator profile settings (Figure 64) will open.

If "no" or "read" is set in the "Administrators" menu item, but "write" is set in the "Change of their password by the administrator" item, the window with administrator password and data settings will open (Figure 66.).

First name
Second name
Last name
Phone
E-mails (comma separated)
Address
Save
Password
Password confirmation
Reset password

Figure 66.

- 2. Make the necessary changes to the fields.
- 3. Click "Save".

LOCKING OUT ADMINISTRATOR ACCOUNTS

To lock out an administrator account:

- 1. Select the "Administrators" menu item.
- Click opposite the account name.
 A window with administrator profile settings will open.
- 3. Click on the "Lockout on" field.
- 4. Select the lockout date from the calendar (Figure 67):





5. Click "Lockout".

The operation confirmation modal window will open.

6. Confirm the action by clicking the "Yes" button.

The administrator account will be locked out on the set date.

To change the administrator account lockout settings:

- 1. Select the "Administrators" menu item.
- Click opposite the account name.
 A window with administrator profile settings will open.
- 3. Select a date in the "Lockout on" field and click "Lockout". The operation confirmation modal window will open.
- 4. Confirm the action by clicking the "Yes" button.
- 5. Click "Save".

The created account will be displayed in the table.

To unblock an administrator account click "Cancel lockout" and confirm the action in the modal window that opens by clicking "Yes".

To unlock a locked out administrator account, click "Unlock" (Figure 68) and confirm the action in the modal window that opens by clicking "Yes".

Figure 68

REMOVING ADMINISTRATORS

To remove the administrator account:

- 1. Go to the list of administrators.
- 2. Click $\stackrel{\text{le}}{=}$ to the right of the corresponding account.
- 3. Confirm the action in the model window that opens by clicking "OK".

The message "Administrator removed" will be displayed at the top of the window.

CALL AND CONFERENCE MANAGEMENT

This section describes the following administrator web interface menu items:

- Calls;
- Conferences;
- Call Quality Ratings;
- Call Recordings;
- Links to Chats and Calls.

The "Calls" and "Conferences" sections contain lists of calls and conferences (see Figure 69 and Figure 70). Calls and conferences are displayed in reverse chronological order.

The following actions are available in the administrator web interface of the corporate server:

- managing conferences and calls (searching, terminating, downloading logs and member lists, clearing logs, etc.);
- setting up call and conference recording;
- setting up links to Chats and Calls;
- setting up call quality ratings.

Calls	Selected 37		2025-02-10 12:58:01 - 2025-02-10 12:58:01		search by name, chat ID, ca		ter huid, email, name or a	search Clear logs
	Chat	Call chat	Call	Active ~ ~	Call start time ^ Y	Call end time	∧ ✓ Destroy call	Call logs
Ω	Personal chat	Call 8d1e7017	8d1e7017-6111-	false		2025-02-05		🕹 Download logs
			5b2d-9518-			03:54:56.6828	32Z	
			05f5a21979bb					
47	Test group chat	Call 72338c08	72338c08-456c-	false		2025-01-27		a Download logs
			5f72-bcc8-			13:50:51.1427	92Z	0
			f7afcf0d1143					
0	Personal chat	Call 378c04db	378c04db 709d	false		2024 12 27		+ Developed land
			51a6-8875-	laise		09-17-28 4142	457	Z Download logs
			d8700641eeb0			00.17.20.4142		

Figure 69

Table 27

The "Calls" table contains the following information (Table 27):

Column name	Information
Chat	The name of the chat in which the call is made
Call chat	Call chat ID
Call	Call ID
Active	Call status
Call start	Date and time of call start
Call termination	Date and time of call termination
Terminate call	The call termination option is available, if the call has not been terminated yet
Call logs	Downloading call logs is available



Cont	erences	elected 29	2025-02-10 13	3:06:56 - 2025-02-10	13:06:56	search by name, chat ID, ca	Enter huid, em	ail, name or a	search Clear logs
	Chat	Conference chat	Conference name	Conference ID	Active ^ >	Conference start time ^ ~	Conference end time ^ ~	Destroy conference	Conference logs
()	no the far	eXpress Con		f49bfdcc-5bda- 5b5d-84ba- d2c21dcef793	false				📩 Download logs
0	(pyrear So	eXpress Con		d0747e70-1407- 561e-bebe- b1f98c4028b4	false				🛓 Download logs
ø	Test group chat	eXpress Con		f18358f2-038f- 52a8-a939- afac106e4972	false				📩 Download logs

The "Conferences" table contains the following information (Table 28):

Table 28	
Column name	Information
Chat	The name of the chat in which the user started the conference
Conference chat	The conference chat name that is displayed in the application
Conference title	The conference name that is displayed in the application
Conference ID	Conference identification number
Active	Conference status
Conference start	Date and time of conference start
Conference end	Date and time of conference termination
Terminate conference	The conference termination option is available, if the conference has not been terminated yet
Conference logs	Downloading call logs is available

CALL AND CONFERENCE MANAGEMENT

Available operations:

- terminating current call/conference;
- setting up the rating filter;;
- searching for a call/conference;
- downloading the log;
- deleting the log;
- exporting the list of participants.

To terminate the current call/conference

1. Click \times .

A modal window will open.

2. Click "OK" in the modal window that opens.

The name of the chat or conference is a hyperlink to a window with detailed information about the conference or chat in which the call is made (see Figure 71.).



Personal chat		Members Events JSON	Q₂ Events table	Chat JSON
	ID	ffb62123-6e27-0304-1ff8- f4b7066d19f4		
	Description	1		
	Active	true		
	Туре	chat		
	Members	00		
	Created at	2024-12-12 13:44:55Z		

Figure 71.

The call ID is a hyperlink to a window with information about the call (see Figure 72.).

Voex	Voex call 8d1e7017-6111-5b2d-9518-05f5a21979bb													
room_i	room_id: 81371003													
Call	Call participants													
	Name	Platform	App version	In call now	Publishing screen	Joined call	user_huid	udid	server_id	audio	video	screen	Answered at	Hangup at
0	1b684094-			false	false	false	1b684094-	1b9c3ea8-	9082b98f-	false	false	false	2025-02-05	2025-02-05
	a7c5-5a1d-						a7c5-5a1d-	2f25-4b1f-	f274-5fd3-				03:54:41.830921Z	03:54:56.682832Z
	b36e-						b36e-	8fca-	8784-					
	469eb14f91c4						469eb14f91c4	85d7ef28532a	e031ffb164b1					

Figure 72.

Information about call events and call participants is viewed in the same way as in the "Chats" section — see page 88.

The user can rate the quality of the call or conference by receiving a corresponding request at the end of the conversation. The administrator can configure user rating filter (for more information on setting up call/conference rating feature, see page 34).

To search for a call, enter its name or ID, e-mail or HUID (in full or in part) in the corresponding search bar and click "Search" (see Figure 69).

To search for a conference, enter its name, ID, e-mail or HUID (in whole or in part) in the appropriate search box and click "Search" (Figure 70).

To download the call or conference log, click "Download Logs" in the call/conference line (see Figure 69 and Figure 70). The log will be exported to a TXT format (see Figure 73).

🧾 info.log – Блокнот	- 0	\times
Файл Правка Формат Вид	Справка	
12:41:05.055 [info] 12:41:05.076 [info] 12:41:08.313 [info] 12:41:08.331 [info] 12:41:08.333 [info]	<pre>starting SessionsDispatcher #PID<0.11668 device -> messaging: call_new %{"call_id" trusts -> messaging: vr_call_terminate %{ terminating dispatcher: d21d0435-02bb-5fd SessionsDispatcher.terminate, reason: {:su</pre>	39> => "ca 5-b hut

To delete all call and conference logs, click "Clear Logs" in the upper right corner (see Figure 69 and Figure 70).

The message "Logs cleared" will be displayed in the window header (see Figure 74).

Logs cleared	×
Calls Selected	1 2024-11-12 11:32:51 - 2024-11-12 11:32:51 search by name, chat ID, ca search Clear logs

Figure 74

If all logs are deleted, when you click "Download Logs", a notification will be displayed saying "No logs for call <call ID> are available" (see Figure 75).

No logs for call: 16d74c07-232	a-5ed3-9140-220161bf1138							
Calls Selected 14				2024-11-22	09:29:35 - 2024-11-22 09:29:3	5 search by name	, chat ID, ci search Clea	ar logs
Chat	Call chat	Call	Active ~ ~	Call start time $\wedge \vee$	Call end time $\sim\!\!\!\!\sim$	Destroy call	Call logs	

Figure 75

To export the list of chat participants in the CSV format, click "Users" in the

chat window. In the window that opens, click

SETTING UP CALL AND CONFERENCE RECORDING

To set up videoconferencing recording, you need to:

- Install recording components (see the document "Administrator's Guide. Installation", section "Installing call and conference recording components");
- enable and configure Recordings Bot;
- configure the recording mode;
- configure the records retention period.

SETTING UP RECORDINGS BOT

To set up Recordings Bot:

1. In the main menu of the CTS server administrator web interface, click on the "Internal Bots" item.

The "Internal Bots" window will open (see Figure 76):

Name ^ ~	APP_ID ~ ~	URL ^ ~	Description	Proto version	Enabled	Created at	Updated at		
Poll Bot	menarpel, lot	http://spine.5000/apii//lipel_bothinered	Бот для тенерация отчетов отросов	4	Yes	2024-11-05 07:06:09	2024-12-03 12:37:30		1
Notifications	Herai sofficiation, (of	ingultegres KOSS agrit fitedfluidere, Johnsma	Бог док открывая сообщенный в геобальный чай	4	Yes	2023-12-25 12:41:59	2024-10-21 14:27:21	Q ₀	1
Recordings Bot	Harrad recordings, lod	tella lingine 4550 agés / Incondings, Judi Harrad	for gra-pagnarasati s trenas saucas nesesa	4	Yes	2023-12-25 12:42:11	2024-10-21 14:27:08	Q ₀ ⁰	,
Conference Notifier Bot	Merai seferesa, jut	Mg, ingine 4000 agits fromkeneros, justificienai	for gre pegoenosi o spegrosupe sodoproupe	4	Yes	2023-12-25 12:41:59	2023-12-25 12:45:39		-





2. In the "Recordings Bot" line, click 🖉.

The "Edit Bot" window will open (see Figure 77):

Edit bot	i ≣ Back to list
Name	
Recordings Bot	
URL (bot HTTP API endpoint)	
The many booksary to college, bottomat	
example: https://bot-hostname.com/api/v1/botx_trello	
Z Enabled	
Protocol version	
4	
Save	

Figure 77

- 3. Check the "Enabled" box and click "Save".
- 4. In the "Recordings Bot" line, click 🥵.
- 5. The "Configure Recordings Bot" window will open (see Figure 78):

Settings of Recordings Bot		← Back to internal bots
Bot language English	~	
Bot timezone UTC+3	~	
Save		

Figure 78

- 6. In the "Bot Language" list, select the language for the bot's messages.
- 7. In the "Bot time zone" list, select the time zone that will be indicated in the bot's messages.
- 8. Click "Save".

SETTING UP RECORDING MODE

To set up the recording mode:

- 1. In the main menu of the CTS server administrator web interface, click on the ``VoEx'' item.
- In the "VoEx" block, check the box "Enable the ability to record calls" (see Figure 79).



VoEx
Enable screen sharing for corporate users outside of contour
TURN Server (comma separated)
STUN Server (comma separated)
Voex local network
Force relay ice
Allow TCP ICE
Enable audio streams mixing
Enable VP9 videocodec support
Enable use of internal host for servers
List of servers which will use internal janus host (comma separated)
Enable ability to record calls
Recording mode
Video and audio V
Save

3. Click on the "Recording mode" drop-down list and select the required recording mode (see Table 29):

Recording mode	Result
Video and audio	 Two files are created: an MP4 file — recording of video broadcast, screen sharing and sound from participants' microphones. If the screen is not displayed and/or no participant has turned on the camera, the video recording will show a black background with the names of the participants; an MP3 file — a recording sound from participants' microphones
Screen sharing and audio	 Two files are created: an MP4 file — a recording of screen sharing and sound from participants' microphones. If the screen is not shared, the video recording will show a black background with the names of the participants; an MP3 file — a recording sound from participants' microphones
Audio	Only an MP3 file is created — a recording of sound from participants' microphones

4. Click "Save".

CALL RECORDING

The section is a table in which the administrator can (see Figure 80):

- view the status of call and conference recording processing;
- configure the search filter;
- view the call recording page.

The list shows information about the processing status of terminated calls and conferences. Recordings of calls and conferences in progress are not displayed.



Recordings		All recordings		search by name, chat ID, ca			
Recording	Call ID	Status	Conference name	Error e reason	in	iserted_at	updated_at
adolesia oleh bish bish ar'iaobi'ikole	180900 400 00 00 007		Eorgingerupe: De Maccente		20 09	024-11-02 9:08:20	2024-11-02 12:32:19
1							

The table consists of the following columns (see Table 30):

Tabl		20
IdD	-	. 20
	-	~ ~

Column name	Information
Recording	Recording ID
Call ID	Call or conference ID (call_id)
Status	 Recording status: new. Recording is in the queue for processing; in_progress. Recording is in the process of processing; ok. Recording is ready; error. An error occurred while processing the recording
Conference title	The name of the conference or the name of the group chat in which the call was made, or of the personal chat if it was a one-to-one call or a group call that was started as a one-to-one call
Error reason	Indicates the reason for the error of the transcoding service
inserted_at	Date and time of recording start
updated_at	Date and time of any change to the recording (ready or ready with an error)

To set the call/conference recording status filter

- 1. Select the desired recording parameters from the drop-down list.
 - "All records";
 - "Recordings with error";
 - "Completed recordings"
 - "Recordings in process".
- 2. Click "Search".

A list of selected recordings will be displayed on the screen.

You can search for calls and conferences in the table using the search bar at the top of the window.

To search for a recording, enter its name or ID (in full or in part) in the search bar and click "Search".

To view information about a specific recording, select it from the list. A window with recording data will open (see Figure 81).





Figure 81

SETTING UP RECORDS RETENTION PERIOD

To set up the records retention period:

- 1. In the main menu of the CTS server administrator web interface, go to the "File Service" item.
- 2. In the "File Service Retention" block, in the "Call Recordings" field, specify the number of days during which files will be stored on the server (see Figure 82):



Docun	in days. Empty value disables file cleaning nents
Media	
Voice	
Voex r	ecordings
14 Voex le	ogs
Conta	rts
Links	
Poll re	port

Note. If you leave this field blank, files will not be deleted from the server.

3. Click "Save".

CALL QUALITY RATINGS

The section is a table in which the administrator can:

- view call and conference ratings;
- configure the search filter;
- download call and conference logs.

Calls and conferences are displayed in reverse chronological order (see Figure 83.).

Call re	eports Selected 0	Issue -		✓ Rate Or	nly bad 🗸	2025-02-10	14:31:07 - 2025-02-10	0 14:31:07	search by name, chat	ID, ca search
Rate	Chat/Conference	janus_url	call_id	user_huid	udid	platform	app_version	inserted_a	t reasons	Call logs
1										

Figure 83.

The table contains the following information (see Table 31):

Column name	Information
Rating	Rating types: • good — positive rating; • Bad — negative rating
Chat/Conference	Name of the chat/conference in which the call is made
Janus_url	Madia server address
Call_id	Call ID
User_huid	User ID
Udid	Device ID
Platform	The platform on which the call was made



Column name	Information
App_version	Application version
Inserted_at	Call time
Reasons	 Reason for the poor grade. Some reasons are set automatically by the system. Types of reasons: input_issue (issue with incoming audio); output_issue (issue with outgoing audio); poor_sound (poor audio quality); poor_connection (issues with connection); poor_video (issues with video); poor_sharing (issues with screen sharing); toggler_disabled (microphone/camera will not turn on (only web)); user_disconnected (call disconnection); other (other — enter a description of your problem in the call or conference); webrtc (reason is submitted by the system without user participation. Reports network issues when establishing connections); session (reason is submitted by the system without user participation. Reports issues with the session microservice); domain (reason is sent by the system without user participation. Reports issues in the application server part that caused the call to close, or errors in sending call_offer, call_answer, vr_publish, vr_publish_audio, vr_unpublish, room_leave, call_terminate, room_join, call_new events)
Call logs	Downloading call logs

At the top of the window are buttons that can be used to set up the filter to display the necessary calls and conferences (Figure 83.).

To set up the user call/conference quality rating filter by Reason:

- 1. Select the desired rating parameter from the "Reason" drop-down list.
- 2. Click "Search".

A list of calls and conferences in which the specified problem occurred will be displayed on the screen.

To set up the user call/conference quality rating filter by Rating:

- 1. Select the desired rating type from the "Rating" drop-down list.
- 2. Click "Search".

A list of calls and conferences with the specified rating will be displayed on the screen.

To set the call/conference rating filter for a specific time interval:

- 1. Specify the time interval by clicking on the date filter box. In the window that opens, select the required values and click "Done".
- 2. Click "Search".

A list of calls and conferences for a specific time interval will be displayed on the screen.

You can search for calls and conferences in the table using the search bar at the top of the window (see Figure 69 and Figure 70).

For details on setting the call quality rating, see section "Setting Up User Rating of Call or Conference Quality".

LINKS TO CHATS/CALLS

The "Chat/Call Links" section allows you to set up personalized links to join a closed chat, channel, video conference, or call (see Figure 84). Links of this type are shorter than standard links.

A standard link is a link, which has been generated based on a host (for example: https://xlink.ms).

A personalized link is a link generated based on the host specified by the administrator (for example: https://link.companyname.ru).

Links to chats/calls		
Join link host		
https://xlnk.ms		
Use for links that permit access for		
public	*	
Generate links for guest users to this server		
Save		

Figure 84

In the "Link Host" field, the administrator enters the address of the company's local link server. The default value of this field is https://xlink.ms.

In the "Use for links that allow access at least" drop-down list, the administrator selects one of the access levels for joining by link. The following values exist (see Table 32):

Table 32

Value	Access level
public (by default)	Unlimited access level. The link is available to everyone, including unregistered users.
corporate	Medium access level. The link is available to users from corporate servers
trusts	Limited access level. The link is available to users from the same server and trust servers

When clicking on a personalized link, the user is redirected to the link server. Users who do not have the application installed will first be redirected to the store to download and install the customer's corporate application.

Standard and personalized links are generated depending on the ratio of access levels set in the administrator web interface and in the application (see Table 33):

Table 33

Setting up access in the administrator web interface	Setting up access in the client application	Which link is generated
public	All users (including guests)	
	Any corporate server	Personalized link
	Trusted corporate servers	
corporate	All users (including guests)	Standard link
	Any corporate server	Devece palized link
	Trusted corporate servers	Personalized link
trusts	Trusted corporate servers	
	All users (including guests)	Standard link
	Any corporate server	Personalized link

Note. To generate a link for guests, check the box "Generate links for guest users to this server".



To set up the link:

- 1. Go to the "Chat/Call Links" section (see Figure 84).
- 2. In the "Link Host" field, enter the link service address.
- 3. In the "Use for links that allow access at least" drop-down list, select the desired link access level.
- 4. Click "Save".

MANAGING CHATS

This section describes the following administrator web interface menu items:

- Catalog;
- Chats;
- Open Chats;
- Global Chat;
- Links to Chats and Calls.

CATALOG

Open corporate chats, channels and bots are displayed in the "Catalog" filter on the "Chats" page in Express CS. The list of chats, channels and bots is provided in the "Catalog" section of the administrator web interface (see Figure 85).

Catalo	g			
	Position	Name	Туре	D
=	1	Conference Notifier Bot	bot	7ab5ca55-0ead-41cc-9451-bfb85d0f18a6
=	2	task_mng	bot	ff1f62ab-b78f-5f7a-97ef-59be21416a4e
≡	3	email_smartapp	bot	387d2854-6e30-5c63-bee1-4b8941cb981a
=	4	homescreen-smartapp-catalog	bot	70b37269-d349-5d5d-9e40-6448a1c20a1e
=	5	homescreen-smartapp	bot	78a8c4ed-1505-534d-a089-94d59e7e1f81
=	6	proxy_app	bot	211043f7-b76c-5c9f-be0a-298b00ed6687
=	7	Открытый чат для общения	chat	4fc9042c-283d-5131-9732-b08ce9c01a5e
=	8	Recordings Bot	bot	4bebb62e-6b65-4a01-ad34-54632e9f2c48
=	9	Notifications bot	bot	b48790cf-e3ea-4edb-8d97-7ae3c1c55b4e
			Save	
1				

Figure 85

The table contains the following information (see Table 34):

Column name	Information	
Position	Position of the chat in the list on the "Catalog" tab	
Name	Chat name	
View	Chat type: • chat (chat); • group_chat (group chat); • channel (channel); • bot (chatbot)	
ID	Chat ID	



To change the position of a chat in the list:

- Click \equiv in the chat data line and drag it to a new position;
- enter the desired value in the "Position" field in the chat data line.
 The order in which chats are displayed on the user's device will change.

CHATS

Information about the app's chats is presented in the "Chats" section in the form of a table (see Figure 86).

Chat	s			search by name, huid
	Name ~ ~	Routing	Chat type ^ ~	Updated at
()	next/files/files/	hybrid	group_chat	2025-02-10 14:42:34.963250Z
0	Bread a2bd271 5ial-527/3c36-009-586-686-686-686	empty	thread	2025-02-07 12:37:56.538158Z
Ċ	Test group shall	hybrid	group_chat	2025-02-07 12:37:41.827228Z
0	Тестевый чат поддержия	hybrid	group_chat	2025-02-07 07:41:38.013318Z
0	uhu	cts	group_chat	2025-02-06 10:23:21.733779Z

Figure 86

The table contains the following information (see Table 35):

Table 35	
Column name	Information
Name	Chat name
Routing	 Information about the server on which the chat was created: cts (chat data is stored on the CTS server); rts (chat data is stored on the RTS server); hybrid (chat data is stored on the CTS RTS server)
Туре	Chat type: • chat (chat); • group_chat (group chat); • channel (channel); • botx (chatbot)
Update date	Time of the last event in the chat (message, adding a user, etc.)

The chat name is a hyperlink to the chat window with detailed information about the chat (see Figure 87).

1807	A Members	ents JSON G	Events table Chat JSON	🙊 Make the chat open	Enable end-to-end (e2ee) encryption
	0	ID Description Active Type Members Created at	d2fad032-83b2-5eb1-82d2-80b true group_chat 2025-03-17 11:38:56Z	5693d6b84	



The information card contains: the chat avatar, its ID, description, status, type, chat participants and creation date.

The top part of the window contains the following buttons (see Table 36):

Table 36	
Button	Purpose
Users	Transition to the chat participants list
JSON events	Displaying chat events in JSON format
Events table	Displaying chat events in the form of a table
JSON chat	Displaying chat in JSON format
Convert to open chat/Convert to closed chat	Convert group chat to closed/open

CHAT OPERATIONS

The following functionality is available to the administrator:

- viewing of chat events;
- viewing information about an event;
- viewing detailed information about chat participants;
- changing the user's status in chat;
- downloading chat participants list in the CSV format;
- adding a contact to the chat;
- adding a contact list from a file;
- deleting a contact from the chat.

To view chat events, click "Events Table". A table will open containing information about chat events: message transmission, calls, adding/removing users (see Figure 88):

Chat even	ts	← B;	ack to chat search	n by sync_id sear
Event type	Sync ID	Sender HUID/UDID	Created at	Updated at
message_new	Readings and crist many	COMPANY (1988) (1998) (1988)	2024-11-12	2024-11-12
	000x100x100	10000001100111001	08:08:33Z	08:08:33Z
		(metropolitical)		
sent to:				

Figure 88

Note. Sender HUID/UDID are a hyperlink to the user profile.

The events table contains the following fields (see Table 37):

Column	Purpose
Event type	Event types are shown in the table below
Sync ID	Event ID
Sender HUID/UDID	Sender ID



Column	Purpose
Creation date	Date and time of event
Update date	Date and time of event update

The list of chat event types is shown in Table 38.

Event type	Value
chat_name_changed	Chat name has been changed
chat_description_changed	Chat description has been changed
chat_settings_changed	Chat settings have been changed
message_new	New message was sent in the chat
message_pinned	A message was pinned in the chat
message_unpinned	A message was unpinned in the chat
call_start	Call start
call_end	Call termination
routing_changed	The connection routing diagram has been changed
user_joined_to_chat	A user has joined the chat
left_from_chat	A user has left the chat
admin_added_to_chat	A user was assigned a chat administrator
added_to_chat	A user was added to the chat by the administrator
deleted_from_chat	A user was deleted from the chat by the administrator



To view information about the event, click on its Sync ID. A window will open (see Figure 89):

Chat event			Seck to chat	<>> Events JSON	Q Events table
Sync ID	PERSONAL PROPERTY AND ADDRESS OF	Linked events: 0			
Group Chat ID	POWER AND SOUTH ADDRESS OF				
	Service and				
"group, class, (d)	F . "Window state loop give stations of the				
1997 S. 1998.					
100.001000.001	Contraction of the second				
	and a state of the				
Sec. (47)	"Revenue, once onthe same commencement"				
Section 1 1	many of the standard sector of the sector of a sector plane is a set of the				
programming rests	decreasing in him of the second of the president				
(Pgywaddio of Colorida	personal subdivision of the first state of the grant				
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And the second s	ality and the second				
And the other statements of the	as able of the light fairing, while the page of the strandship of				
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	and a fight part of a strategy of a state of the state of				
	page (the other descention).				
	P. Carbanati strate larks many press (subscie)				
Taxable Accelera	as darfs. "Species of an international control of				
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"mark, mills (3)					
1000 (001 (001 (001	(see ride.)				
- a Management of the					
	ne de la case companya deserve aux de sur la case derre.				
	(naisease)				
	Province case which have been and and				
Tank July 1 Tak	sense and the second second to be a second s				
"particular (all")	"Salate on containing one"				

Figure 89

To view detailed information about chat participants, click "Users" on the toolbar.

A window will open with a list of chat participants in the form of a table (see Figure 90).

Members of «personal chat»			← Back to chat	& Download as .CSV	earch by huid search		
	Name	Company	Position	HUID	Conn type	Administrator	Routing schema
0	apagositeos			1714007108-7718-805-805-805-8071079	cts	true	Routing
	Stagog Mecana			1746-6 403 (11) 200 - 400 (10)	cts	false	Routing
1							

Figure 90

The table contains the following information (see Table 39):

Column name	Information
Name	Contact name and avatar. A hyperlink that opens the user details window
Company name	The company the contact belongs to



Column name	Information
HUID	Contact ID
Conn type	The server through which the message traffic goes
CTS endpoint	Server URL
Admin	 Chat participant status: true — the contact is the chat administrator; false — the contact is not the chat administrator
Routing diagram	Hyperlink to the chat participants routing diagram

Important! Chat management has certain limitations. If there are users from different servers in the chat, the chat can be managed in the administrator web interface of only the server where the chat administrators are located. In the web interface of the administrator of other servers, the chat is only displayed in the general list of chats. If users of such a server are removed from the chat, it will no longer be displayed in the general list of chats.

To assign a chat administrator:

- 1. Open the "Chat Users" window.
- 2. Select the user with the value "false" in the "Admin" column.
- 3. Left click on the "false" value. In the modal window that appears, confirm the operation.
- 4. The "false" value will change to "true" and the user will be assigned as an administrator.

Note. To make a chat administrator a regular user, repeat the previous operation by changing the above value from "true" to "false".

To export the list of chat participants in the CSV format, click "Users" in the

chat window. In the window that opens, click

To add a contact to a chat, click "Add Users" in the upper right corner. In the window that opens, select a contact.

You can also import a list of users from a .CSV file.

To add a contact list from a file:

- 1. Click "Import Users" (see Figure 90).
- 2. In the window that opens, click "Select file" (see Figure 91).

Import members to «Chat»	← Back to members
File with users	
Choose File result.csv	
Import	
Users are not found or not active or having duplicate logins	
AD Login	
call id	

Figure 91

3. Select the file containing the user list from the file system.

The system will search the server for users specified in the file by login and email address. Login and e-mail must be unique. The user will not be added if:

- the user was not found on the server;
- multiple users were found with the specified login/e-mail.

To delete a contact from the chat, click 🕮 .

OPEN CHATS

Information about open chats and channels is presented in the "Open Chats" section (see Figure 92). Only corporate chats can be open chats.

Ope	n chats			search by name, chat ID, cr	search	Create
	Name ^ ~	Updated at				
0	Conservativati un grecologonati	2024-11-02 09:25:05:812301Z	Ċ			
1						

Figure 92

The chat name is a hyperlink that opens a chat window with detailed information. The "Update Date" column shows the time of the last event in the chat.

Information about chat events and chat participants is viewed in the same way as in the "Chats" section — see page 88.

Operations with open chat:

- creating a chat;
- changing the chat status;
- adding a contact;
- exporting the list of participants;
- assigning administrator;
- deleting a chat.

To create an open chat:

 In the upper right corner of the "Open chats" section, click "Create". A window will open (see Figure 93):

Create open chat	# L
Name	
Description	
Avatar	
Choose File No file chosen	
Chat type Group chat ~	
Save	

Figure 93

2. Fill in the fields of the form (see Table 40):

Field	Description
Name	Chat name
Description	A brief description of the chat, its purpose
Avatar	An image that will be used as the chat avatar
Chat type	Drop-down menu for choosing the type of chat: group chat or channel



3. Click "Save".

The chat will be displayed in the list of open chats and any user assigned to this server will be able to join it.

To change chat status to closed chat, open the chat window and click "Convert to closed chat" in the upper right corner.

To change the status of a closed chat to open chat, open the chat window and click "Convert to open chat".

To add a contact to a chat:

- 1. In the chat window, click "Users".
- 2. Click "Add Users" in the upper right corner.
- The "Users" window will open.
- 3. Click "+" to add a contact.

Note. The "Add Users" button will be displayed after at least one user has been added to the chat.

By default, every newly created chat is set to public.

To export the list of chat participants in the CSV format, click "Users" in the

chat window. In the window that opens, click

To assign a chat administrator:

- 1. Click "Chat Users".
- 2. Select the user with the value "false" in the "Admin" column.
- 3. Left click on the "false" value. In the modal window that appears, confirm the operation.

The "false" value will change to "true" and the user will be assigned as an administrator.

To make a chat administrator a regular user, repeat the previous operation by changing the above value from "true" to "false".

If the number of users joining the chat exceeds 256, the open chat goes into optimization mode.

In the optimization mode, the appearance of the window with detailed information about the chat changes (Figure 94.):

🛔 Men	ers 🚸 Events JSON 🤤 Events table 🛷 Chat JSON 🙊 Make the chat private 🔒 Enable end-to-end (e2ee) encryption
ID	4fc9042c-283d-5131-9732-b08ce9c01a5e
Description	1234567890
Active	true
Туре	group_chat
Members	1013
Created at	2024-05-24 11:27:29Z



Instead of avatars of specific users, the total number of users who joined the chat is indicated.

Pagination is added to the chat participant list window: the previously single list of users is divided into pages.

The appearance of the routing diagram is changing: instead of avatars attached to servers, the total number of users on each involved server is shown.

To delete an open chat, click ⁽ⁱⁱⁱ⁾. The message "Open chat was deleted" will be displayed at the top of the window.

GLOBAL CHAT

Global chat (see Figure 95) is a system chat that allows you to send messages that are relevant to all users, for example:

- information about application updates;
- maintenance notifications.

Global chat is created on all types of servers (CTS, ETS, RTS). There can only be one global chat per server. To send messages to the global chat, you need to connect Notifications Bot (see page 101).

Global chat settings
Name
Global
Avatar
Choose File No file chosen
Description
Global Chat on CTS server
C Enabled
Save

Figure 95

The "Global Chat" section consists of two blocks:

- "Global Chat";
- Global Bots.

GLOBAL CHAT SETTINGS

To set up global chat:

- 1. Select the "Global Chat" section in the administrator panel.
- 2. In the window that opens, specify the chat parameters.
- 3. Enable/disable the "Global Chat" functionality by checking/unchecking the box next to the "Enabled" field (global chat is disabled by default).
- 4. Click "Save".



LINKS TO CHATS/CALLS

The procedure for creating personalized links for joining a closed chat and channel is described above in the section "Links to Chats/Calls".

CHATBOTS AND SMARTAPP

This section describes the following administrator web interface menu items:

- Bots;
- Global Bots;
- Internal Bots;
- SmartApp.

CHATBOTS

All data about chatbots is presented in the "Bots" menu item in the form of a table (see Figure 96).

Bots					O Crea	ite Bot
Name ^ ~	APP_ID ~~	URL ^ ~	Description	Created at ^ ~	Updated at ~ ~	
StickerBot	StickerBot	100-110-120-0-0004	Director	2024-11-26 06:49:24	2024-11-26 06:51:13	/
InviteBot	InviteBot	148-110-128-3-8-8001	Indulte	2024-11-26 06:35:24	2024-11-26 06:35:24	-
CalendarSmartApp	CalendarSmartApp	148-110-128-2 128-8882	CalendarDinarilitys	2024-11-08 07:15:22	2024-11-08 07:15:22	-
task_mng	task_mng	Mp.115 125.5.8.852	Measurery reason	2023-12-27 14:35:12	2024-10-12 10:39:23	-
nomescreen-smartapp-catalog	homescreen-smartapp-catalog	1483-1795 (Ch.S.A.B.8008)	Поменая страница наталог	2023-12-26 09:16:43	2024-10-12 10:39:10	1

Figure 96

The table contains the following information (see Table 41):

Table 41

Column name	Information
Name	Chatbot name
APP_ID	Unique text identifier of the chatbot
URL	Link to the bot API
Description	Information that gives an idea of the purpose of the chatbot
Creation date	The date when the chatbot was connected
Update date	Date of last access to the chatbot

To edit chatbot information, click ***.

To delete a chatbot from the server, click ⁽ⁱⁱⁱ⁾.

CONNECTING A CHATBOT

To connect a chatbot:

- 1. To go the "Bots" menu item.
- 2. In the upper right corner, click "Create Bot".

A window for entering parameters for a new bot will open (see Figure 97).



Create bot	I Back to list
App ID (unique human-readable bot identifier)	
example: trello_bot	
URL (bot HTTP API endpoint)	
example: https://bot-hostname.com/api/v1/botx_trello	
Name	
Description	
Enabled Status Message (message that shown in bot status, e.g. when bot disable)	ed)
Avatar	
Choose File No file chosen	
Protocol version	
4	

3. Fill in the fields of the settings (see Table 42).

Table 42

Field name	Information
Name	Chatbot name
APP_ID	Unique text identifier of the chatbot APP_ID must not contain spaces. Instead of spaces, it is permissible to use the underscore character "_".
URL	Link to the chatbot API
Description	Information that gives an idea of the purpose of the chatbot
Message`s status	The message that will be displayed on behalf of the administrator when a user accesses the chatbot. The chatbot must be disabled
Protocol version	The version of the BotX platform code used to send commands to the chatbot
Enabled	Enables/disables the chatbot

4. Click "Save".

CHANGING CHATBOT PARAMETERS

To change chatbot parameters:

1. Click on \checkmark in the line of the chatbot that needs to be configured.

A window will open (see Figure 98):



Bot Series and Series	Edit bot	I Back to list
Particle D Serve two reactions to be taken of two reactions the two reactions the	Bot	
B Searchay	2 Enabled	
Served kay Book processes have an exactable but biser family in the served kay in the serve	D	
sevel ky Pape Display human solution is demonstrained in a solution of the so	82748x235-8041-8x45-8x58-x715xx488x8xx	
Apr ID: oper hunses watabable too identifier) InvideDd: State in the invision of the invisi	Secret key	
App 2 (palage human resolute lot biotenting) invided URL point TAPA resolution Description invided Description invided Description invided Description invided Description invided Description invided Concord File No In concord Protocol version 4 Concord File No In concord Protocol version invided invided to concord Protocol version invided to concord invided to concord invided to concord invide (statuli) version invide to concord invide (statuli) ver	305404-029880-03420-04-04	
InvideBit Concept The Mendance of Concept InvideBit InvideBit Description InvideBit InvideBit <td>App ID (unique human-readable bot identifier)</td> <td></td>	App ID (unique human-readable bot identifier)	
Bacing tangken general point and the set of	InviteBot	
Uik like Irin AR indepident correction frage: Takes in extra search applies it likes is a stank it is a search applies it likes it is a stank	example: trello_bot	
Invited in the shore analysis of heat yeals invited in the status, e.g. when bet diabled invited invit	JRL (bot HTTP API endpoint)	
Name inviteBot inviteBot Centropion inviteBot Centropion inviteBot Centropion	example: https://bot-hostname.com/api/v1/botx_trello	
inviteBot Description Descript	Name	
Description inviteBot Status Mossage inseases that shown in bot status. 4.g. when bot disable() Torces File No file chosen Protocol version 4 Bot's properties Strinds of meations (default) Corporate is allowed to access the bot Corporate - access is allowed to access the bot Corporate - access is allowed to corporate uses (default) Users who are allowed to access the bot Corporate - access is allowed to corporate uses (default) Users who are allowed to access the bot Corporate is adlowed to access the bot Corporate is addowed to access Corporate is addowed t	InviteBot	
invideBot Status Message inessage into shown in bot status, e.g. when bot disabled Avatar Choose File No file chosen Protocol Version 4 Bot's properties Kinds of messages available to bot commands - accept mentions (default) Users who are allowed to access the bot commands - accept methods (default) Users who are allowed to access the bot commands - accept methods (default) Users who are allowed to access the bot commands - accept methods (default) Users who are allowed to access the bot commands - accept methods (default) Users who are allowed to access the bot commands - accept methods (default) Users who are allowed to access the bot commands - accept methods (default) Users who are allowed to access the bot commands - accept methods (default) Users who are allowed to access the bot commands - accept methods Default a difference D	Description	
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Avatar Choose Fie No file chosen Protocol version 4 Bot's properties Kinds of messages available to bot commands - accept mentions (default) Users who are allowed to access the bot commands - access is allowed to corporate users (default) Users who are allowed to access the bot all - search is allowed to access the bot all - search is allowed to access the bot bot contact in bots catalog Autow creating chats Use BotX cutom SSL CA certificate Use BotX cutom SSL CA certificate Check crf Use BotX cutom SSL CA certificate Check crf Use POS token for bot authentication Search key to generate PDS JWT token Smartapp Enabled Availabilit to everyone Name Tite Actions in the message menu Actions on a contact card Actions on a contact card Actions on a contact card Tite Action Key In Ison Key Ison K	Status Message (message that shown in bot status, e.g. when bot disabled)	
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4	Protocol version	
Bot's properties Kinds of messages available to bot commands - accept mentions (default) verse who are allowed to access the bot corporate - access is allowed to corporate users (default) verse who are allowed to access the bot all - search the bot all - search the bot or all (RTSCTS) users (default) bese both contact in bots catalog Allow creating chats Use Both costna SL CA certificate Use Both custom SSL CA certificate Use Dot both for bot authentication Use PDS token	4	
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corporate - access is allowed to corporate users (default) Users who are allowed to search the bot all - search is allowed to all (RTS/CTS) users (default) Show the bot contact in bots catalog Allow creating chats Use BotX SSL CA certificate Use BotX cutom SSL CA certificate Use BotX client private key Use BotX client SSL certificate Check crl Use PDS token for bot authentication Search key to generate PDS JWT token Smartapp Enabled Availability Availabile to everyone Name invite Actions in the message menu Itte Action Icon Actions on a contact card Tite Action Icon	Jsers who are allowed to access the bot	
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Smartapp Enabled Available to everyone Available to everyone Available to everyone Available to everyone Available to everyone Available to everyone Available to everyone Available to everyone Available to everyone		
Smartapp Enabled Available to everyone Name Invite Available chosen Actions in the message menu Title Action Actions on a contact card Title Action Icon Scope		4
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Name Invite Invite Avatar Choose File No file chosen Actions in the message menu Title Action Icon Actions on a contact card Title Action Icon Scope	Available to everyone	*
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Actions on a contact card		
+ Title Action Icon Scope	Actions on a contact card	
Title Action Icon Scope		
itte Action Icon Scope		





Each chatbot has customizable settings (Table 43):

_			
Ta	h	ρ	43
1 u		0	15

Function name	Description
Message types available to the bot	 Responsible for the types of messages that the chatbot accepts. Possible values: all – the chatbot accepts all messages sent to the chat; commands – the chatbot accepts a message if it is mentioned in the message; none – chatbot does not accept any messages
Who is allowed to access the bot	 Determines the types of users that are allowed to access the chatbot. Possible values: all – access is granted to all (RTS/CTS) users; corporate – access is granted to corporate users (default value); trust – access is granted to corporate users from trusted servers; local – access is granted to users from a local CTS server
Who is allowed to search for the bot	 Determines the types of users who are allowed to access the chatbot search feature in the app. Possible values: all – access is granted to all (RTS/CTS) users; corporate – access is granted to corporate users (default value); trust – access is granted to corporate users from trusted servers; local – access is granted to users from a local CTS server
Show bot contact in bot channel	Display in the list of chatbots
Allow creating chats	Creation of chats by the chatbot
Use BotX SSL CA certificate	The chatbot uses a chain of SSL certificates from certification authorities that issued the bot's certificate. The SSL certificate data for the chatbot is entered in the "Server Settings" section (see page 25)
Use personal SSL CA BotX certificate	Using a separate SSL certificate from the CA that issued the bot's certificate
Use BotX client SSL private key	Uploading a file containing the private key of the client certificate, in order to ensure mTLS, when BotX accesses the bot
Use client SSL BotX certificate	Uploading a file containing the client certificate for mTLS purposes, when BotX accesses the bot
Check CRL	Checking the bot's certificate for its presence in the list of revoked certificates
Use OpenID token for bot authentication	Using OpenID token for bot authentication
Use PDS token for bot authentication	Electronic signing of documents using the PDS service
Secret key for generating JWT PDS token	PDS key

To activate the functions "Allow creating chats", "Show bot contact in bot channel", "Use BotX SSL CA certificate", "Use OpenID token for bot authentication"» and "Use PDS token for bot authentication", check the corresponding boxes.

To add a secret key for generating a JWT PDS token, enter it in the appropriate field.

To connect SmartApp, check the appropriate box, enter the chatbot name and select an avatar from the file system.

2. Click "Save".



GLOBAL BOTS

Global bots are bots that can be added to the global chat.

The section is a table with information about bots (see Figure 99).

Global bots		Add bot to global cha	at
Name	Description	Enabled	
Poll Bot	for gen morphages overon orpocon	Yes	br
Notifications bot	for gre repairs coduposi a redatunat ur	Yes	b

Figure 99

The table contains the following information (see Table 44):

Table 44

Column name	Information
Name	Bot name
Description	Bot purpose
Enabled	Bot operation status

To add a bot to the global chat:

- 1. Click "Add bot to global chat".
- 2. In the window that opens, select the desired bot.

Note. For successful addition, the bot must first be enabled.

3. Click "+" to the left of the bot's name.

The list of global bots will open and the message "Bot added to global chat" will appear at the top of the screen.

To remove a bot from the global chat, select the desired bot and click ^a. The bot will be removed from the list, and the message "Bot removed from global chat" will be displayed at the top of the screen.

INTERNAL BOTS

Information about internal bots is provided in the "Internal Bots" subsection (Figure 100) of the administrator web interface.

Name ^ Y	APP ID ~~	URL ^ Y	Description	Proto version	Enabled	Created at	Updated at		
Poll Bot	international Just	Mg-lingine 4000 april 1 (pol _ both menul	for generospages overce orpcom	4	Yes	2024-11-05 07:06:09	2024-12-03 12:37:30		1
Notifications bot	internal softballors, just	Ng ingre KISSapir (nethalore, Johnson)	Sor yre erganas codupent e redarunat raf	4	Yes	2023-12-25 12:41:59	2024-10-21 14:27:21	0,	1
Recordings Bot	Menalmorthys, 34	http://righte.9000/apriv/inscendings_bedinternal	for graving parameters at a trends and the second s	4	Yes	2023-12-25 12:42:11	2024-10-21 14:27:08	00	
Conference Notifier Bot	internal conference, (ed.	http://tigtina.4000/aprin/iconferences_jochhitemai	бот для радрагенной з Тредстопция конформицая	4	Yes	2023-12-25 12:41:59	2023-12-25 12:45:39		1





Internal bots are created automatically after the system is deployed.

The table contains the following information (see Table 45):

Table 45	
Column name	Information
Name	Bot name
APP_ID	Bot ID
URL	Bot address
Description	Bot purpose
Protocol version	Version of the protocol for working with botx
Enabled	Bot operation status
Creation date	Bot creation date and time
Update date	Time of last change of bot parameters

To view internal bot parameters, select the desired bot from the list. The bot editing window will open (see Figure 101).

Edit bot	I Back to list
Name	
Notifications bot	
URL (bot HTTP API endpoint)	
The region secondary model along the second	
example: https://bot-hostname.com/api/v1/botx_trello	
Enabled	
Protocol version	
4	
Save	

Figure 101

To return to the general list of internal bots, click "Back to List".

To edit internal bot parameters:

1. Select a bot from the list.

The bot editing window will open.

- 2. If necessary, change the bot name or URL.
- 3. If necessary, change the bot's operating status by checking the "Enabled" field.
- 4. Click "Save".

The edit window will close and the changes will be displayed in the general list of internal bots.

DESCRIPTION OF CONFERENCE BOT

Conference Bot is designed to notify users about upcoming conferences.

The bot informs the user:

- about the creation of a new conference with his participation;
- upcoming conferences;
- about changes in the parameters of the upcoming conference.



When a conference is canceled, information about it disappears from the user's chat window.

When a scheduled conference with the user's participation is created, the user receives a notification in the chat with the bot. All bot functions are available (disabling notifications, setting reminders, setting time zone, search).

The conference announcement includes:

- information about the creation of a conference or changes to its parameters;
- date and time of conference creation;
- name of the organizer of the conference;
- link to join the conference;
- the "Show Members" button.

To reset the time zone in Conference Bot for a particular user, go to the "Users" table of the conference_bot_prod database and indicate the value "null" for the required HUID in the "timezone" field.

To set the default timezone in Conference Bot, use the "DEFAULT_TIMEZONE" variable in the settings.yaml file on the server.

For example, to set the time zone to "Europe/Samara" add the value:

```
conference bot env override:
```

DEFAULT_TIMEZONE: Europe/Samara

Then run the command:

sudo dpl -d conference_bot

Note. Users who have already configured the time zone value in their application will not have their data changed. The configuration will only work for new users.

DESCRIPTION OF NOTIFICATIONS BOT

Notifications Bot is designed to send messages to the Global Chat. Users with administrator rights can send messages to the Global Chat.

To add an administrator to Notifications Bot:

1. Go to the "Internal Bots" tab (see Figure 102) and click ⁴⁶.

Internal bots									
Name ^ Y	APP_ID ~ ~	URL ^ ~	Description	Proto version	Enabled	Created at	Updated at		
Notifications bot	internal:notifications_bot	http://nginx:4000/api/v1/notifications_bot/internal	Бог для отправня сообщений в гообветьный чаят	4	Yes	2023-12-25 12:41:59	2024-10-21 14:27:21	0%	1

Figure 102

The list of administrators will be displayed in the window that opens.

2. Click "Add Bot Administrator".

In the list that opens, select the user who should receive administrator rights and click +.

3. The message "Administrator added" will be displayed at the top of the screen.



DESCRIPTION OF RECORDINGS BOT

Recordings Bot is designed to notify the user when a call or conference is ready to be recorded. Configuring Recordings Bot is described in the section "Configuring Call and Conference Recording".

DESCRIPTION OF POLL BOT

Poll Bot is designed to generate poll reports.

In order for the users to be able to create polls, Poll Bot must be enabled (see Figure 103).

Internal bo	ots							
Name ~ ~	APP_ID ^ ~	URL ^ ~	Description	Proto version	Enabled	Created at	Updated at	
Poll Bot	internal:poll_bot	http://nginx:4000/apl/v1/poll_bot/internal	Бот для темпрация отчетов опросов	4	Yes	2024-11-05 07:06:09	2024-12-03 12:37:30	1

Figure 103

SMARTAPP

SmartApp is a web application, which is implemented as an add-on, executed inside Express, and designed for accessing corporate services and systems.

The "SmartApp" section consists of the following blocks:

- general settings in the "SmartApp" section;
- settings of SmartAppProxy hosts;
- mobile client menu configuration;
- setting up menu configuration for web and desktop apps.

SETTING UP THE DISPLAY IN THE MAIN MENU

The "SmartApp" block contains the following settings:

- enable/disable displaying the SmartApp item in the main menu of Express CS, which allows you to open a section with built-in web applications;
- options for the display of the "Main" (home page) and "Services" SmartApp items in the main menu (Figure 104);
- choosing SmartApp as the e-mail client.

Note. Home page is the section that opens by default. The home page displays basic corporate information.



Display in the main menu at the	APP_ID	
beginning The selected SmartApp will be	Not selected	
displayed in a separate item of the main menu, automatically launched at the start of eXpress and immediately displayed on the screen SmartApps catalog enabled Display in the main menu The selected SmartApp will be	APP_ID	Placement
he selected SmartApp will be	Default estales	In the end
The selected SmartApp will be displayed in the main menu	Default catalog ~	In the end 🗸
The selected SmartApp will be displayed in the main menu Email client	Default catalog	In the end V

Figure 104

Clicking on the "APP_ID" field in the "Main Menu" section opens a list of all APP_ID bots (Figure 105). At the end of the APP_ID of bots that do not have SmartApp enabled in their settings, the suffix "Off" is displayed.

SmartApps	
Main menu	
Display in the main menu at the beginning	APP_ID
The selected SmartApp will be	Not selected
menu, automatically launched at the	CalendarSmartApp
start of express and immediately displayed on the screen	email_smartapp
	homescreen-smartapp homescreen-smartapp-catalog
SmartApps catalog enabled	proxy_app
Display in the main menu	task_mng
The selected SmartApp will be displayed in the main menu	Default catalog V In the end V
Email client	APP_ID
The selected SmartApp will be used as a email client	email_smartapp 🗸
Save	
Save	

Figure 105

To set up the display of the SmartApp menu on user devices:

1. Check/uncheck the "SmartApp Catalog Enabled" checkbox to display the menu.

On user devices, all enabled SmartApp are displayed in the menu by default.

- 2. To selectively display SmartApp, go to the "Bots" section.
- 3. Select the desired bot from the list and click ✓ in the line of the chatbot that needs to be configured (for more information on configuration, see "Changing Chatbot Parameters").
- 4. In the form that opens, go to the "SmartApp" block (see Figure 106).



Smartapp				
Enabled				
Availability				
Available to every	one			~
Name				
Calendar SmartApp	p			
Avatar				
Choose File No f	file chosen			
Actions in the	e message menu			
+				
Title	Action		lcon	
Actions on a	contact card			
+				
Title	Action	lcon	Scope	
		Save		

5. In the "Accessibility" field, select an access mode from the list.

Note. In the "Available to groups" mode, an additional field for specifying a user group will be displayed in the form. For more information about user groups, see "Operations with User Groups".

In the "Available to all" mode, the enabled SmartApp will be displayed on all user devices. In the "Available to groups" mode, the enabled SmartApp will be displayed only for the specified user groups.

- 6. If necessary, enter the name of the group or leave the field blank.
- 7. Click "Save".

To select a SmartApp that will be displayed in the first position in the main menu and on the Express CS start screen as the home page:

- 1. Click on the "APP_ID" field (see Figure 105).
- 2. Select the desired application from the drop-down list.
- 3. Click "Save".

To set up the parameters of the SmartApp that will be displayed in the main menu:

- 1. Click on the "APP_ID" field (see Figure 105).
- 2. Select the desired application from the drop-down list.
- 3. Click on the "Location" field.
- 4. Select one of the following options (Table 46):

Table 46

Parameter	Value
In the end	The SmartApp icon is displayed last, after all the main menu items.
After the previous SmartApp	The SmartApp icon is displayed after the SmartApp item, which is displayed in the first position in the main menu.

5. Click "Save".

A description of configuration of SmartApp parameters in the main menu of Express CS is shown below (Table 47 and Table 48):



Table 47

Display in the beginning of the main menu	Result
APP_ID: "Not selected"	No $\textcircled{2}$ icon is displayed in the main menu; home page is opened as start page when Express CS is loaded
APP_ID: "APP_ID value"	The sicon is displayed as the first item in the main menu; home page is opened as start page when Express CS is loaded

Table 48

Display in the main menu	Location: "In the end"	Location: "After the previous SmartApp"
APP_ID: "Not selected"	The icon is displayed as the last item in the main menu; clicking on the icon opens a list of enabled SmartApps	The icon is displayed as the second item in the main menu; clicking on the icon opens a list of enabled SmartApps
APP_ID: "APP_ID value"	The icon is displayed as the last item in the main menu; clicking on the icon opens a list of enabled SmartApps	The icon is displayed as the second item in the main menu; clicking on the icon opens the selected SmartApp

SETTING UP SMARTAPPPROXY HOSTS

If a file from the KSPD should become part of a SmartApp Frontend web page (for example, a video in the player), transmission of files through the File Service does not work. For this task, there is an option to transmit files via smartapp_proxy (see Figure 107).

SmartAppProxy Hosts Config		
Host ID a2okqxjx1shfri42	Host	Create
Host ID	Host	
k2z4yym8pso50pt3	https://server.ru	8
f0h1da315qaey31m	https://server.ru	0

Figure 107

The configuration of SmartAppProxy hosts is described in Appendix 7 of the document "Volume 1. "Administrator's Guide. Installation".

MOBILE APPLICATION MENU CONFIGURATION

The "Mobile Client Menu" (Figure 108) section contains the following settings:

- "Mobile clients menu" (enable/disable the possibility to customize the menu of mobile apps via the administrator web interface);
- "Menu configuration" (configuring the parameters of displaying menu items in mobile apps).



Mobile menu configuration
Menu configuration enabled
Menu configuration
Main Functions
Quick Functions
Unlisted Functions
Chats
E Calls
Default smartapps catalog
homescreen-smartapp
homescreen-smartapp-catalog
≡ task_mng
= proxy_app
email_smartapp
invite
Ealendar SmartApp
Save

The SmartApp display settings in the eXpress mobile application are described below (Table 49):

Table 49

Block name	Value
Bottom navigation	SmartApp are displayed in the bottom menu of the eXpress mobile app. There must be at least two and no more than four items in a block
Quick Features	SmartApp are displayed in the "Quick Features" window of the mobile application
Unused functions	SmartApp are not displayed in the mobile app

To move a SmartApp , left-click the SmartApp name bar, hold, and drag it.

To pin SmartApp, check the "Pinned" box (Figure 108). Pinning an item imposes the following restrictions on mobile application users:

- they are always at the beginning of the SmartApp list;
- they can only be shifted among themselves.

If SmartApp is selected in the APP ID field, "Home" (Figure 108) appears next to its name in the "Menu configuration" block. The selected SmartApp will be displayed in the main menu and automatically started when the application is launched.

SETTING UP MENU CONFIGURATION FOR WEB AND DESKTOP APPS

The "Web and desktop client menu configuration" section (Figure 109) contains the following settings:

- "Web and Desktop client menu configuration" (enable/disable the possibility to customize the menu of web and desktop applications via the administrator web interface);
- "Menu configuration" (configuring the parameters of displaying menu items in web- and desktop applications).

The configuration of the menu of web and desktop applications is set up in the same way as mobile application menu configuration.

Web and Desktop menu configuration
Menu configuration enabled
Menu configuration
Main Functions
Quick Functions
Unlisted Functions
Chats
Contacts
E Calls
Default smartapps catalog
i homescreen-smartapp
homescreen-smartapp-catalog
= task_mng
e proxy_app
email_smartapp
invite
Calendar SmartApp
Save



MANAGING FILE SERVICE

In the "File Service" section, the administrator can configure the following:

- access contour to files transmitted in chats;
- file storage periods;
- proxying when delivering static content.



SETTING UP DATA ACCESS CONTOUR

A user's access to sending or reading a file depends on their affiliation with the server, the CTN, and the contour (network IP address).

To set up access contour:

- 1. Go to the "File Service" section.
- 2. Check "Enabled" to enable access according to access contour.
- 3. Fill in the following fields (Figure 110, Table 50):

Enabled	
Corporate users ca	n send
any	
Corporate users ca	n read
any	·
Corporate files can	read
any	
P masks (comma s	eparated)
178.252.127.202/3	2, 83.220.239.156/32
Save	
Contour's switching (files. Contour info for leature enabled is pe that were uploaded ir are turning the conto	enabled or disabled) doesn't affect the downloading of uploaded files in corporate or foreign contour with rsisted in database and can't be changed. So the files iside a contour stay inside the contour, even when you ur's feature off.
The only thing you ca example: make all of	an do is changing the IP Masks to match your needs, fo your users as foreign or corporate.

Figure 110

Parameter	Value
mask IP (separated by commas)	IP address of the CTS server contour and subnet mask (separated by slash)
CTN users can send	 Setting up file sending options. Possible values: any — a CTN user can send files to a user from any server, but only the CTN user can open this file; corporate — a CTN user can send files to a user from the CTS server of his organization, but only the CTN user can open this file; trust — a CTN user can send files to a user with whose server the sender has established a trusted connection, but only the CTN user can open this file. Files cannot be sent to open chats/channels and to chats with disabled end-to-end encryption; local — a CTN user can send files to a user from the same server as the sender, but only the CTN user can open this file. Files cannot be sent to open chats/channels and to chats with disabled end-to-end encryption;
CTN users can read	 Setting up receipt and viewing of files by CTN users. Possible values: any — a CTN user can receive and open files from a sender from any server. The sender's and recipient's contour does not affect access to files; corporate — a CTN user can receive and open files from a sender from his organization's CTS server. The sender's and recipient's contour does not affect access to files; trust — a CTN user can receive and open files, provided that a


Parameter	Value
	 trusted connection is established between the sender's and recipient's servers. The sender's and recipient's contour does not affect access to files; local — CTN user can receive and open files from a sender from the same server as the sender. The sender's and recipient's contour does not affect access to files; contour — a CTN user can receive and open files from a sender from the same contour as the sender
Who can read CTN files	 Setting up receipt and viewing of files sent from CTN. Possible values: any — a user from any server can receive and open files sent from the CTN. The sender's and recipient's contour does not affect access to files; corporate — a user from the CTS server of the sender's organization can receive and open files sent from the CTN. The sender's and recipient's contour does not affect access to files; trust — a user with whose server the sender has established a trusted connection can receive and open files sent from the CTN. The sender's and recipient's contour does not affect access to files; trust — a user from the same server as the sender can receive and open files sent from the CTN. The sender's and recipient's contour does not affect access to files; local — a user from the same server as the sender can receive and open files sent from the CTN. The sender's and recipient's contour does not affect access to files; contour — a user from the Same contour as the sender can receive and open files sent from the CTN.

4. Click "Save".

SETTING UP FILE STORAGE PERIODS

To set up file storage periods:

1. Go to the "File Service" section.

The "File Service Retention" window will open (see Figure 111).

- 2. Specify the number of days during which documents, media, and voice files shall be stored. An empty value will disable the file cleaning function.
- 3. Click "Save".



Values ir	a days. Empty value disables file cleaning	
Docume	ints	
Media		
Voice		
Voex re	ordings	
14		
Voex log	js	
Contact	S	
Links		
Poll rep	ort	
	1	

Figure 111

Proxying when Delivering Static Content

To enable/disable proxy settings:

1. Go to the "File Service" section.

The "Proxying" window will open (see Figure 112).

- 2. Check/uncheck the "Enabled" field.
- 3. Click "Save".

Proxyii	ng					
Settings fo	proxying w	nile servin	g static fr	om public	clients.	
Enable	l					
Save						

Figure 112

LOGS

This section describes the following administrator web interface menu items:

- Containers;
- Audit Settings;
- Audit.



VIEWING LOGS

eXpress CS does not provide a single source for viewing logs of all product events. Each container has its own event log.

To view the list of Docker containers, select the "Containers" item. A page will open with a list of installed containers in a table format (see Figure 113).

Docker containers					
ID	Name	Image	Created at	Status	
1fabfe72d7e4	/cts-polls-1	regisity public supremipoits 3.35.3	2025-02-05 08:30:31Z	running (Up 5 days (healthy))	>_ logs
bb67cd1fbb8c	/cts-stickers-1	regarity public sequence theore 3, 20, 3	2025-02-05 08:30:31Z	running (Up 6 days (healthy))	>_logs
701d1e867c84	/cts-notifications_bot-1	registry public representatilizations, July 3, 25.3	2025-02-05 08:30:31Z	running (Up 6 days (healthy))	>_logs
6065324b7d8f	/cts-file_service-1	перату развік переналіїна, загодов із 20-1	2025-02-05 08:30:31Z	running (Up 5 days (healthy))	>_ logs
46dfdef4fc6a	/cts-poll_bot-1	registry public sequence (ed., lost 3, 25.3	2025-02-05 08:30:31Z	running (Up 6 days (healthy))	>_ logs
d8a11f73f5aa	/cts-kdc-1	registry public expression 3.25.3	2025-02-05 08:30:31Z	running (Up 5 days (healthy))	>_ logs

Figure 113

The table with the list of installed Docker containers consists of the following columns (Table 51):

Table 51

Column name	Information
ID	Container ID
Name	Container name in the "server_container" format
Image	The directory where the container image is stored
Creation date	Container creation date
Status	Container status, which takes the following values: Created; Restarting; Running; Removing; Paused; Exited; Dead
Logs	Hyperlink to container log



To view a container log:

1. Click on the "Logs" hyperlink next to the Docker container.

The "Docker Container Logs" window will open (see Figure 114).



Figure 114

2. In the "Date" field, specify the time period for which you want to display records on the screen.

Note. If the "Date" field is left blank, all log entries for the day or the latest entries will be displayed on a black screen, according to the number of lines specified in the "Tail" field.

- 3. Enter the number of lines in the "Tail" field.
- 4. Check the "Follow" box to receive real-time event notifications.

Note. The log will be updated with new entries regardless of whether the "Follow" field is checked or not. If the checkbox is set, Express CS will return the administrator to the end of the list to the new event record.

5. Click "Show".

The container log lines will be displayed on a black screen.

When the clipboard is full, new events in the log will overwrite the oldest ones. When updating a container to a new version, old logs are completely erased.

SETTING UP EVENT INFORMATION TRANSMISSION

Express CS has a function for enabling/disabling sending information about security events to the SIEM of the information system into which Express CS is integrated.

Work with SIEM occurs via the TCP protocol in syslog format. When transmitting security event information, only audit data is sent.

To set up the transmission of security information to SIEM:

1. Go to the "Audit Settings" section (see Figure 115).



Audit settings
Audit
Track users connects/disconnects
SIEM
SIEM Enabled
SIEM Host
SIEM Port
SIEM exclude service name from event
SIEM product
SIEM vendor
SIEM version
Save

Figure 115

- 2. Enable/disable the "Track user connections/disconnections" setting in the "Audit" section.
- 3. Click "Save".

To set up the transmission of security information to SIEM:

- 1. Enable/disable the "SIEM Enabled" setting.
- 2. In the "SIEM Host" field, enter the address of the SIEM host.
- 3. In the "SIEM Port" field, specify the SIEM port number.
- 4. Enable/disable the setting "SIEM exclude service name from event generation arguments".
- 5. In the "SIEM Product" field, enter the required service name.
- 6. In the "SIEM Vendor" field, enter the vendor name.
- 7. In the "SIEM version" field, specify the version that is sent to the SIEM (if left blank, the backend version will be used).
- 8. Click "Save".



AUDIT OF ADMINISTRATOR AND USER ACTIONS

A special interface has been implemented in eXpress CS for the performance of audit of the actions of administrators and users.

To view the events table, select the "Audit" item (see Figure 116).

Audit E	vents				
user se	earch query	~		event searce	th query search
					Ma Download as .03V
	Туре	User	Administrator	Application	Created at
883b1118	admin_logged_in		sergey iteration		2025-02-11 08:03:50.423270
567df424	admin_logged_in		sargey decoducito.		2025-02-11 07:24:40.971342
ad7ccaba	admin_logged_in		1427101		2025-02-11 07:15:21.280428
1684e110	cts_user_registered	Roltz remains		desktop	2025-02-11 07:04:51.458397
627d556f	admin_logged_in		sergey Recolumits		2025-02-11 06:22:24.476524
555b463f	background_wallpaper_settings_upda	ted	beite resultvijfedat organi, ru		2025-02-10 15:11:52.332783
1cdd20f7	background_wallpaper_settings_upda	ted	fets readingfolds square re		2025-02-10 15:11:47.970168
dd8fdcb9	admin_logged_in		heite reactive@iofial.orgress.re		2025-02-10 14:56:59.219984

Figure 116

The parameters of the events recorded in the audit log are shown in the following table (Table 52):

Table 52

Column name	Information
View	Event ID as a hyperlink and its type. Clicking the hyperlink opens the event's program code
User	User name
Administrator	Name of the administrator
Application	The platform on which the event occurred
Creation date	Event registration date

The following events are logged in the audit log (see Table 53):

Table 53

Event	Description
account_deleted	Deleting an account
activations_platform_lifetimes_settings_updated	Activation lifetime settings for platforms have been updated
ad_integration_settings_changed	AD integration settings have been changed
ad_settings_have_been_set	AD settings have been set using the CLI method
admin_added	An administrator has been added using the CLI method
admin_authentication_updated	System administrator authorization settings have been updated
admin_block_canceled	Administrator account lockout has been canceled
admin_block_date_set	Administrator account lockout date has been set
admin_blocked	Administrator account has been locked out
admin_created	An administrator account has been created
admin_deferred_block_canceled	Delayed administrator account lockout has been canceled
admin_deferred_block_set	Delayed administrator account lockout has been configured
admin_deleted	An administrator account has been deleted



Event	Description
admin_group_created	An administrator group has been created
admin_group_deleted	An administrator group has been deleted
admin_group_updated	The name of the administrator group has been updated
admin_info_updated	Administrator information has been updated
admin_logged_in	Administrator has logged in
admin_logged_out	Administrator has logged out
admin_login_backoff_timeout	The number of unsuccessful administrator login attempts over a certain period (by default -1 hour) has exceeded the maximum allowed value (by default -3)
admin_login_op_disabled	The number of unsuccessful administrator login attempts has exceeded the maximum allowed value (by default -10)
admin_login_op_failed	Unsuccessful administrator login attempt without exceeding the allowed values
admin_unblocked	Administrator account has been unblocked
admin_updated_parameters	Administrator account settings have been updated
admin_updated_password	Administrator account password has been updated
audit_settings_updated	Audit settings have been updated
background_wallpaper_settings_updated	Chat background settings for clients have been updated
blocked_user_instruction_updated	Instructions for sending e-mails to blocked users have been updated
bot_added	Chatbot has been added
bot_deleted	Chatbot has been deleted
bot_properties_updated	Chatbot settings have been updated
bot_smartapp_properties_updated	SmartApp settings have been updated
bot_updated	Chatbot has been updated (for the RTS and ETS servers only applies to internal bots)
botx_certificate_deleted	BotX certificate has been deleted
botx_certificate_updated	BotX certificate has been updated
call_logs_cleaned	Call logs have been cleaned
chat_converted_to_open	Chat converted to open
chat_created (chat_type=channel)	Open channel has been created
chat_created (corporate=true)	Open chat has been created
chat_deleted	Chat has been deleted
chat_deleted (chat_type=channel)	Channel has been deleted from open chats
chat_deleted (corporate=true)	Open chat has been deleted
chat_member_added	Chat member has been added
chat_member_become_admin	Chat member has become chat administrator
chat_member_become_nonadmin	Chat participant has lost chat administrator rights
chat_member_deleted	Chat member has been deleted from chat
clean	Chat history has been cleared
consent_notification_settings_updated	Consent notification settings have been updated
cts_user_registered	CIS user has been registered
cts_user_registration_failed	Unsuccessful attempt of user self-registration on the CTS server
custom_profile_updated	Avatar in the user profile has been updated
devops_token_created	DevOps token has been created
e2e_encryption_disabled	End-to-end encryption has been disabled in ordinary chat
e2e_encryption_disabled_in_open_chat	End-to-end encryption has been disabled in open chat
e2e_encryption_enabled	End-to-end encryption has been enabled in ordinary chat
e2e_encryption_enabled_in_open_chat	End-to-end encryption has been enabled in open chat
email registration settings changed	Settings of registration by e-mail have been



Event	Description		
	changed		
email_settinds_changed	Mail server settings changed		
email_settings_changed	SMTP server settings have been set using the CLI method		
external_client_user_created	External client user has been created		
external_client_user_deleted	External client user has been deleted		
external_client_user_updated	External client user has been updated		
faq_updated	FAQ have been updated		
field_permissions_changed	Profile field visibility settings changed		
file_contour_settings_updated	Settings of contour file access have been updated		
file_service_settings_changed	File storage settings changed		
file_settings_have_been_set	File storage settings have been set using the CLI method		
files_retired	File storage has been cleared		
global_chat_enabled	Global chat has been enabled		
global_chat_settings_changed	Global chat settings have been changed		
hide_name_settings_updated	Hide server name settings have been updated		
local_user_created	Local user has been created		
local_user_deleted	Local user has been deleted		
local_user_updated	Local user has been updated		
max_failed_login_attempts_reached	Maximum number of attempts for a corporate user to log in to the application (with an indication of the platform) has been reached		
messaging_links_to_chats_changed	Settings for generating links to chats/calls have been changed		
new_user_instruction_updated	New user instructions have been updated		
open_chat_created	Open chat has been created		
open_chat_deleted	Open chat has been deleted		
openid_settings_changed	OpenID settings have been changed		
profiles_download	The list of users has been downloaded to a file		
registration_by_email_mask_settings_changed	E-mail mask setting have been changed		
registration_settings_changed	Registration settings have been changed		
roles_group_created	User group in the role model has been created		
roles_group_deleted	User group in the role model has been deleted		
roles_group_updated	User group in the role model has been updated		
roles_rule_created	Rule in the role model has been created		
roles_rule_deleted	Rule in the role model has been deleted		
roles_rule_toggled	Status of a rule in the role model has been changed		
roles_rule_updated	Rule in the role model has been updated		
server_avatar_updated	Server avatar has been updated		
server_features_changed	changed		
server_under_maintenance_changed	Notification of maintenance work has been changed		
server_update_alert_changed	Update alert changed		
sip_settings_updated	SIP settings have been updated		
smartapp_proxy_host_created	SmartAppProxy host has been created		
Smartapp_proxy_host_deleted	SmartAppProxy host has been deleted		
smartapp_updated	Settings of a specific SmartApp have been updated		
smartapps_settings_changed	SmartApp settings have been updated		
sticker_pack_created	Sticker pack has been created		
sticker_pack_deleted	Sticker pack has been deleted		
sticker_pack_saved	Information about sticker pack has been saved		
sticker_pack_updated	Sticker pack has been updated		
sticker_saved	Sticker has been saved		
support_info_updated	technical support contacts have been changed		
trusts_certificate_deleted	Irust TLS-certificate has been deleted		
trusts_certificate_updated	Irust TLS-certificate has been updated		



Event	Description
trusts_server_created	Trust connection to another server has been created
trusts_server_deleted	Trust connection to another server has been deleted
trusts_settings_changed	Trust settings have been changed
user_added	User has been added using the CLI method
user_added_to_logout_list	User has been added to the corporate server logout request list
user_connected	User has logged in to the application (with an indication of the platform)
user_custom_profile_confirmed	Request to change the user profile has been confirmed
user_custom_profile_rejected	Request to change the user profile has been rejected
user_deleted_from_logout_list	User has been deleted from the list of requests to logout from the corporate server
user_disconnected	User has logged out of the application (with an indication of the platform)
user_logout_confirmed	User system logout has been confirmed
user_logout_rejected	User logout has been rejected
user_logout_requested	User system logout has been requested
user_requested_logout	User corporate server logout has been requested
user_unblocked	User has been unblocked (by IP or phone after exceeding the number of login attempts)
vinteo_settings_updated	Vinteo settings have been updated
voex_etcd_settings_have_been_set	Setting Media Server Settings in ETCD using CLI method
voex_etcd_settings_updated	Call settings have been updated
voex_logs_settings_updated	Media call server log settings have been updated
voex_settings_have_been_set	Media server settings have been configured using the CLI method
voex settings updated	Media call server settings have been updated

To search for events in the table, fields at the top of the window are used (Figure 117.).

Audit Events						
user search query		~	~	~	event search query	search
				android	📥 Do	wnload as .CSV
				aurora		
Туре	User	Administrator	Appli	desktop	Created at	
883b1118 admin_logged_in		sergey dorosherika		web	2025-02-11 (08:03:50.423270
567df424 admin_logged_in		sergey dorosherika			2025-02-11 (07:24:40.971342
ad7ccaba admin_logged_in		admin			2025-02-11 (07:15:21.280428

Figure 117.

- search by user search is performed by user name in the system;
- in the drop-down lists, you can select the administrator name, event type, and platform;
- search by events full-text search for events is performed in program code.

To download the data displayed on the screen as a single data file, click

Lownload as .CSV

APPLICATION PERFORMANCE STATISTICS

eXpress CS collects statistical information about the number of users, chats, messages and group calls per unit of time and presents it in a visual form — a widget.

The "Statistics" section contains a set of widgets in the form of graphs and pie charts (see Figure 118).

Widget parameters are set by default, the administrator cannot add a new widget or edit an existing one.



Figure 118

The following functionality is available to the administrator:

- selecting the information viewing interval ;
- viewing information about the users;
- viewing information about the chats;
- viewing information about the messages;
- viewing information about group calls.

To set the interval for which you want to display statistical information, select a value from the drop-down list in the upper right corner of the widget (see Figure 118).

To set an interval different from the predefined values, select "Other", click in the field to the left of the drop-down list and set the start and end of the period using the calendar that opens (see Figure 119.).



m 1	1/13/	2024					m 1	1/13/	2024					Apply	1	Clear		
<		0	ct 20	24					N	ov 20	24							
Su	Мо	Tu	We	Th	Fr	Sa	Su	Мо	Ти	We	Th	Fr	Sa					
29	30	1	2	3	4	5	27	28	29	30	31	1	2					
6	7	8	9	10	11	12	3	4	5	6	7	8	9					
13	14	15	16	17	18	19	10	11	12	13	44	45	16					
20	21	22	23	24	25	26	47	48	19	20	24	22	23					
27	28	29	30	31	1	2	24	25	26	27	28	29	30					
3	4	5	6	7	8	9	4	2	3	4	5	6	7					

Figure 119.

Hovering over a point on the graph will display statistics for a specific day.

To view statistical information about users, open the "Users" tab.

The following widgets will be available in the window that opens:

- number of online users;
- number of registered users;
- registrations by platforms;
- number of registrations per day.

To view statistical information about newly created chats, open the "Chats" tab (see Figure 120).



Figure 120

The window that opens will display statistics on chat creation for the selected period:

- total number of created chats;
- number of chats created per day.



To view statistical information about sent messages, open the "Messages" tab (see Figure 121).



Figure 121

The following widgets will be available in the window that opens:

- total volume of messages stored in the database;
- total volume of files stored in the database;
- total number of messages for a given period;
- total number of new messages for a given period;
- number of messages sent from the corporate server (CTS);
- number of messages sent from the regional server (RTS).

To view statistical information about group calls, open the "Group Calls" tab (see Figure 122).

C UNLIMITED PRODUCTION



Figure 122

The following widgets will be available in the window that opens:

- number of group calls for a given period;
- average duration of group calls in minutes;
- number of participants in group calls by type;
- top 10 users who created group calls.

MANAGING STICKERS

The "Stickers" section is a table with information about sticker catalogs (see Figure 123).



tickers						O Create
D	Name	Count	Public	Created at	Updated at	
fd85595e-11bf-5a23-a844-7bdeafa18968	fegromered	2	true	2025-04-01T12:41:56.734901Z	2025-04-01T12:45:38.242868Z	Û
4e549384-4715-5641-a6ec-191ceeefb417	recrossel	0	true	2025-04-01T10:11:25.994087Z	2025-04-01T10:11:25.994087Z	
b363f0e-67c7-5d14-9cff-91de27251a81	TECTORIAN	0	true	2025-03-21T12:53:02.197941Z	2025-03-21T13:07:00.688972Z	8
7f05018-5091-542e-bfec-da7e79974990	1001	0	true	2025-01-15T12:19:21.200908Z	2025-01-15T12:19:21.200908Z	
bc70b33-4476-502e-bcee-f42b1c1e33ce		0	true	2024-12-05T09:25:22.188612Z	2024-12-05T09:25:22.188612Z	8
697d301-2834-5931-b33c-71898c08ed70	Accesses	2	true	2024-11-14T09:40:16.563755Z	2025-03-05T07:20:54.485814Z	

Figure 123

The sticker catalog table contains the following data (see Table 54):

7	а	bl	e	54	

Column name	Information
ID	Sticker catalog identifier. Assigned automatically
Name	Sticker catalog name
Q-ty	Number of stickers contained in the catalog
Public	 Possible values: false — the catalog is available only to users of the current server; true — the catalog is available to all users
Creation date	Sticker catalog creation date
Update date	Date of last change in the sticker catalog

The following functionality is available to the administrator:

- creating a sticker catalog;
- creating a sticker catalog preview;
- viewing a sticker catalog;
- sorting stickers;
- deleting stickers;
- deleting a sticker catalog.

To create a sticker catalog:

- Click "Create " in the upper right corner. The "Create Sticker Pack" window will open (see Figure 124).
- 2. In the "Name" field, enter the name of the catalog.
- 3. Click "Create".

Create sticker pack	Back to list
Name	
Create	

Figure 124



A window for uploading stickers will open (Figure 125):

Upload a new stickers to	Animals	Stickers from Animals
Image Choose File No file chosen Emoji can't be blank ; press ~+ % + space on r	macos or ikin + , (idin + j) on windows to open emoj picker	Save order
	Create sticker	
Sticker pack info Animals		
	Name	
	Animals	
	Public	
	Save info	

Figure 125

4. In the "Upload New Sticker" area, click "Select File" and select an image from your file system.

Note. The image file must meet the following requirements:

- PNG format;
- file size not more than 512 kb;
- the image shall fit into a 512x512 pixel square.
- 5. In the "Emoji" field, insert an emoji using one of the following methods:
 - follow the instructions below the "Emoji" field;
 - copy the corresponding image on the website: https://emojipedia.org/.
- 6. Click "Create Sticker".

The sticker will be displayed on the right side of the window (Figure 126):

Upload a new stickers to Animals	Stickers from Animals
Image Concer Fiel No the chosen Emopy press * + ₩ - space on maces or jubn + (van +) on undows to some end jubar:	Ŷ
Create slicker	Salve order
Sticker pack info Animals	
Annah Annah 2 Auto Save ato	

Figure 126

- 7. Repeat steps 4-6 to upload all stickers in the catalog.
- 8. Check the "Public" field if the catalog you are creating should be accessible to all users.
- 9. Click "Save information".

To create a sticker catalog preview:

1. Hover the cursor over the uploaded sticker and click \mathbf{F} (see Figure 127).



Stickers from Animals	
	Save order

Figure 127

2. Confirm the action in the modal window that opens.

The selected sticker will be displayed in the lower left part of the window. The message "Sticker pack preview has been set" will be displayed at the top of the window (see Figure 128).

Sticker pack preview saved	X
Upload a new stickers to Animals Image Concent File No the crosen Emerg Proc Crose Crose state on reactor or late + _ (rage + _) on writering to be Crose state	Stickers from Animals
Sticker pack info Animals Name Armatic Pratic Bave stb	

Figure 128

3. Click "Save Information".

The message "Sticker pack has been set" will be displayed at the top of the window.

To view the sticker catalog, click on its name. A window will open (see Figure 129.):

Upload a new stickers to Animals		Stickers from Animals
Image Choose File No file chosen Emoji	poter	
Create sticker		Save order
Sticker pack info Animals		
Arimads 2 Puble	Save mfo	

Figure 129.

To sort stickers:

- 1. Open the required catalog by selecting it from the list.
- 2. In the window that opens , move the desired stickers using the mouse (see Figure 129.).
- 3. Click "Save Sorting".



To delete a sticker from the catalog:

- 1. Open the required catalog by selecting it from the list.
- 2. In the window that opens , select a sticker to be deleted (see Figure 129.).
- 3. Hover the cursor over the sticker and click \Box (see Figure 127).
- 4. Confirm the action.

To delete a sticker catalog:

- 1. Select the desired catalog from the list and click \Box to the right of the catalog (see Figure 123).
- 2. Confirm the action.



ADDITIONAL SETTINGS

Additional settings are divided into two groups:

- requiring container re-creation;
- requiring generation of a new configuration and container restart.

REQUIRING CONTAINER RE-CREATION

All parameters shall be specified in the settings.yaml file:

- global logging level:
 logger level: warning
- Disabling the docker_socket container (will disable the ability to view logs from the administrator panel):

```
docker_socket_proxy_enabled: false
```

- changing S3 and NFS data storage driver (file_service):
 - Example of configuration of connection to S3 storage:

```
file_service_env_override:
ADAPTER: s3
AWS_ACCESS_KEY_ID: access-key
AWS_SECRET_ACCESS_KEY: secres-access-key
AWS_S3_URI: https://storage.minio.local
AWS_S3_BUCKET: cts-files
```

• Example of configuration of connection to NFS storage:

```
ccs admin public driver opts:
  type: nfs
  o: addr=10.3.4.50, vers=3, rw
  device: ":/export/cts ccs admin public"
file service uploads driver opts:
  type: nfs
  o: addr=10.3.4.50,rw
  device: ":/export/file service uploads"
messaging_uploads_driver_opts:
  type: nfs
  o: addr=10.3.4.50, vers=3, rw
  device: ":/export/messaging_uploads"
phonebook_uploads_driver opts:
  type: nfs
  o: addr=10.3.4.50,rw
  device: ":/export/phonebook_uploads"
```

After changing the configuration to recreate the container, while in the /opt/express directory, run:

dpl -d

REQUIRING GENERATION OF A NEW CONFIGURATION AND CONTAINER RESTART

All parameters shall be specified in the settings.yaml file:

• restricting access to the administrator interface:

```
admin_allow:
- 10.0.0.0/8
```



- restricting access to the Prometheus interface:
 prometheus_allow:
 10.0.0.0/8
- changing the path to the administrator interface:
 admin_url: /express-admin-ui
- changing the path to the DLPS administrator interface:
 dlps_url: /dlps-admin-ui

After changing the configuration, in order to apply it, while in the /opt/express directory, run the following command:

dpl -p && dpl -dc restart nginx

Chapter 3

DLPS SERVICE

This chapter describes how to configure the DLPS service and use the DLPS administrator web interface.

AUTHORIZATION IN THE DLPS WEB INTERFACE

To log into the DLPS administrator web interface:

- 1. Enter the following in the address bar of your browser: https://ccs_host/dlps.
- 2. In the window that opens, enter your login and password and click "Login" (see Figure 130).

Note. B	y default,	login is	"admin",	and	password	is	"admin".
---------	------------	----------	----------	-----	----------	----	----------

a L	ogin			
A P	assword			
		Sign in		

Figure 130

After the user has authorized, the main window of the DLPS web interface opens — "Chats" (see Figure 131).

CHATS

Name Chats Chats Mame Chats Personal files Mame Chats botx 2024-12:28708.13.422 Admina ds botx 2024-09-06716.52.322 Groups cts voex_cail 2025-02:07712.30.202 Addit ds group_chat 2024-12:27712.34.222	
Name Chat type Type Updated at Personal files ds botx 2024-12.28708.13.42Z Admins ds botx 2024-09.16716.62.32Z Groups ds botx 2024-09.16716.62.32Z D Audit ds botx 2026-09.7712.30.02Z	
Personal files cts botx 2024-12.28T08.13.42Z Admins cts botx 2024-09-16T16.52.32Z Groups cts voex_call 2025-02.07T12.30.20Z V Audit cts group_chat 2024-12.27T12.34.22Z	
Admins cds botx 2024-09-16716.52:322 Groups cds voex_cal 2025-02-07712.30:202 Addit cds group_chat 2024-12-27712.34:222	
Groups cts veex_cail 2025-02-07T12.30.20Z D Audit cts group_chat 2024-12-27T12.34.22Z	
Audit ds group_chat 2024-12-27112-34:222	
Settings cts voex_call 2025-01-12T17:25:05Z	
Common ds voex_call 2025-01-12117:20.15Z	
Q DLPS Authentication ds voex_call 2025-01-12T17:10.33Z	
Audit settings cts vcex_call 2025-01-12117:08:04Z	
Integrations cts group_chat 2025-01-04T08.23.52Z	
% Chains cts botx 2024-09-16T16-53-59Z	
C Antivirus cts botx 2024-09-16116:56.27Z	
U Dozor cts voex_call 2024-12-28108:11:45Z	
InfoWatch cts voex_call 2024-12-27T12:35:17Z	
U Sandbox cts voex_call 2024-12-19708:11:34Z	





The "Chats" section contains a list of all created chats and calls made. The table below contains a description of the data in the "Chats" section (see Table 55).

Table 55

Column	Information
Name	Chat name or call ID
Chat type	Chat type: • cts — corporate; • rts — regional; • hybrid — hybrid
Туре	User interaction type: • chat — personal chat; • group_chat — group chat; • notes — the "Favorites" chat; • botx — chat with bot; • channel — channel; • voex_call — call
Updated	Date and time of the last event

Clicking on the chat name opens a window containing the information sent in the chat (see Figure 132).



Figure 132

The DLPS web interface stores the following information sent in chat:

- messages;
- media files;
- documents.

PERSONAL FILES

This section allows you to export the entire history of user activity in the form of a personal file — an archive in 7Z format.

The DLPS web interface administrator can create, download or delete a personal file.

The section displays data on personal files, which were generated at the request of the administrator, in tabular form (see Figure 133).



express user G	Personal files		
😔 Chats	HUID	Filters	Status
Q Personal files	05ecf686-	until: 2024-01-17 12:00:00Z, since: 2024-01-14 12:00:00Z	
Admins	97fb0f95-	until: 2024-01-17 12:00:00Z, since: 2024-01-16 12:00:00Z	
矕 Groups	212e7f2c-	until: 2024-01-16 12:00:00Z, since: 2024-01-01 12:00:00Z	Завершено 🛓 🍵
Audit	25eedd68-	until: 2024-01-16 12:00:00Z, since: 2024-01-01 12:00:00Z	Завершено 🛓 💼
	Recommendations	until: 2024-01-16 12:00:00Z, since: 2024-01-01 12:00:00Z	Завершено 🛓 🍵
Common	Rectangeneration (Construction)	until: 2024-01-16 12:00:00Z, since: 2024-01-01 12:00:00Z	Архив сжат
Q DLPS Authentication	Reconcentration	until: 2024-01-18 12:00:00Z, since: 2024-01-08 12:00:00Z	Завершено 🛓 🍵

Figure 133

The table below contains a description of the data in the "Personal Files" section (Table 56):

Table 56

Column	Information
HUID	Contact ID
Filters	The period for which data is requested
Status	 Status of the generated file: completed; started; archive compressed; HTML generated

To create a personal file:

- 1. Click "Generate Archive" in the upper right corner.
- 2. In the window that appears (Figure 134), enter HUID to export a specific contact's history or leave the field blank to create an archive for all contacts.
- 3. Specify a password that will be requested when opening the generated archive.

Note. The minimum password length is 8 characters. The password must contain at least one special character #!?&@\$%^&*(), one number, one lowercase and one uppercase letter.

- 4. Configure a date filter by entering data in the "From" and "To" fields.
- 5. Click "Generate".

An archive with a personal file will be generated. The system message "Personal file created" will be displayed.

	user 🕞	Generate archive # List
Q	Chats	нив
Q	Personal files	Password
	Admins	
쌸	Groups	Since
U	Audit	
		Until
U	Common	Connection
a,	DLPS Authentication	Generale

Figure 134

To download a personal file, click $\stackrel{\bullet}{\rightarrow}$ (see Figure 133). The archive will be exported in 7Z format. Example of archive contents (Figure 135):



Figure 135

To download a personal file, click **(1)** (see Figure 133). The generated archive and information about it will be deleted from the section. The system message "Personal file deleted" will be displayed.

AUDIT OF DLPS WEB INTERFACE

To audit events, a special interface has been implemented in DLPS.

To view the events table, select the "Audit" item (see Figure 136).

express user (*	Audit event	S	→ admin login	v event type Search
🔾 Chats		Туре	Admin	Created at
Personal files	d8a6073a	dlps_admin_logged_in	and Sector in the	2025-02-11T09:17:02.545547
Admins	92fb9250	dlps_admin_logged_out	advertights and only only on	2025-02-09T12:31:56.431649
👻 Groups	a08bba05	dlps_admin_logged_in	advectiges, test cop represe	2025-02-09T12:29:54.216060
(V Audit	c5f1121a	dlps_system_started	Applier.	2025-02-09T12:21:30.824608
Settings	cb35a4ff	dlps_admin_logged_in	advertigens test cosp.orgressa	2025-01-31T14:45:30.618837
Common	afd40f43	dlps_system_started	Receiver a	2025-01-26T15:59:12.476092
Q DLPS Authentication	e13/9acb	dlps_system_started	Appleters	2025-01-26T15:51:07.391445
Audit settings	7d0b35c3	dlps_system_started	by Harri	2025-01-26T15:01:48.742109

Figure 136

The parameters of the events recorded in the audit log are shown in Table 57:

Table 57

Column name	Information
Туре	Event ID as a hyperlink and its type. Clicking the hyperlink opens the event's program code
Administrator	Name of the administrator
Created	Event registration date

The following events are logged in the audit log (see Table 58):

Table 58

Event	Description
dlps_admin_added_to_group	Administrator account has been added to the group
dlps_admin_blocked	Administrator account has been locked out
dlps_admin_changed_antivirus_configuration	Antivirus configuration has been changed
dlps_admin_changed_audit_log_cleaning_schedule	Settings for clearing the audit event log have



Event	Description
	been changed
dlps_admin_changed_audit_settings	Audit settings have been changed by the administrator
dlps_admin_changed_authentication_settings	DLPS authentication settings have been changed
dlps_admin_changed_chains_configuration	Configuration of the validation chains has been changed
dlps_admin_changed_confidential_mode_settings	Sending of confidential mode events has been enabled/disabled
dlps_admin_changed_dozor_configuration	Dozor configuration has been changed
dlps_admin_changed_infowatch_configuration	Infowatch configuration has been changed
dlps_admin_changed_sandbox_configuration	Sandbox configuration has been changed
dlps_admin_changed_searchinform_configuration	Searchinform configuration has been changed
dlps_admin_changed_session_ttl	TTL settings have been changed
dlps_admin_changed_stakhanovets_configuration	Stakhanovets settings have been changed
dlps_admin_created	An administrator account has been created
dlps_admin_deleted	An administrator account has been deleted
dlps_admin_group_created	An administrator group has been created
dlps_admin_group_deleted	An administrator group has been deleted
dlps_admin_group_updated	The name of the administrator group has been updated
dlps_admin_logged_in	Administrator has logged in
dlps_admin_logged_out	Administrator has logged out
dlps_admin_login_backoff_timeout	Failed to authorize administrator in the system during locking out
dlps_admin_login_op_disabled	Locking out of administrator account after the maximum number of authorization attempts
dlps_admin_login_op_failed	Failed to authorize administrator in the system
dlps_admin_removed_from_group	Deleting the administrator account from the administration group
dlps_admin_unblocked	Administrator account lockout has been canceled
dlps_admin_updated_password	Administrator account password has been updated
dlps_system_started	DLPS service has been started

To search for events in the table, fields at the top of the window are used (see Figure 137.):

- admin login field for entering the administrator login manually;
- event type field for entering the event type manually;
- in the drop-down lists, you can select the administrator name and event type.



	 ✓ admin login 			✓ event type	Search
	Туре	Adm	dlps_admin_blocked	reated at	
6968db1	dlps_admin_logged_in	user	dlps_admin_added_to_group dlps_admin_changed_audit_settings	024-11-14T14:02:53.790862	
f16ffb4	dlps_admin_logged_in	user	dlps_admin_created dlps_admin_deleted	024-11-14T13:17:43.366956	
a8dac3e	dlps_admin_logged_in	user	dlps_admin_group_created dlps_admin_group_deleted	024-11-14T11:15:25.280115	
44df84f	dlps_admin_logged_in	user	dlps_admin_group_updated dlps_admin_logged_in	024-11-08T11:33:59.277886	
371dab18	dlps_admin_login_op_failed	admi	dlps_admin_logged_out dlps_admin_login_backoff_timeout	024-11-08T09:57:59.727503	
1994324	dlps_admin_login_op_failed	admi	dlps_admin_login_op_disabled dlps_admin_login_op_failed	024-11-08T09:50:28.985883	
7607470	dlps_admin_updated_password	ginzt	dlps_admin_removed_from_group dlps_admin_updated_password	024-11-08T09:48:52.604355	
75bcb9e	dlps admin logged in	ginzt	dlps_system_started	024-11-08T09:48:29.929618	

Figure 137.

MANAGING DLPS WEB INTERFACE ADMINISTRATORS

Managing DLPS web interface administrators includes the following actions:

- creating and deleting accounts;
- setting up accounts (changing login/password, setting up lockouts and access);
- setting up DLPS authentication;
- management of administrator access rights.

Information about all administrators of the DLPS web interface is available in the "Administrators" section in the form of a table (see Figure 138).

	Admins				O Create
Chats	Login	Source	Created at	Updated at	
Personal files	401012	dlps	2024-09-12T04:39:59	2024-09-12T04:39:59	/ 0
Admins	-	dips	2024-11-08T09:38:49	2024-11-08T09:38:49	/ 0
Groups	genters	dlps	2024-11-08T09:40:08	2024-11-08T09:48:52	/ 0
I Audit	and a supplice	dips	2025-01-15T12:17:08	2025-01-15T12:17:08	/ 0
Settings					

Figure 138

The table below contains a description of the data in the "Administrators" section (see Table 59).

Table 59

Column	Information
Login	Name of the administrator
Source	 Where the account is created: ad — loaded from Active Directory; dlps — created in this section of the DLPS web interface
Created	Date and time when the administrator account was created
Updated	Date and time of the last update



AN ADMINISTRATOR ACCOUNT HAS BEEN CREATED

To create an administrator account, click "Create" in the upper right corner. In the window that opens, enter your login and password, confirm the password and click "Save" (see Figure 139).

Create admin	
Admin login	
can't be blank	
Admin e-mail	
can't be blank	
Admin password	
can't be blank	
Password confirmation	
can't be blank	
Save	

Figure 139

SETTING UP ADMINISTRATOR ACCOUNT

Setting up administrator account involves the following steps:

- changing password;
- changing access rights;
- lockout/unlocking.

These actions are performed in the account settings window.

To go to the account settings window, click *i* in the entry information line (see Figure 138). The settings window for the selected administrator account will open (see Figure 140).

	user 🕞	Admin «admin2»	🎢 List
Q	Chats	Admin password	
2	Personal files	Password confirmation	
	Admins		
5	Groups	Save	
	Audit		
		Groups	
	Common	✓ superuser	
e	DLPS Authentication	Save	
	Audit settings		
	Integrations	Block at	
	Chains	mm/dd/yyyy	
	Antivirus	Block	

Figure 140

To change the administrator login/password, enter new data and click "Save".

To change administrator access rights, select one or more groups and click "Save".

For more information on managing access rights, see the "Setting Up Administrator Access Rights" section.

To set up the administrator account lockout settings:

- 1. Click on the "Lock out by" field.
- 2. Select the date of locking from the calendar.
- 3. Click "Lockout".
- 4. In the modal window that appears, confirm the action by clicking "Yes".

The administrator account will be locked out on the set date.

To cancel administrator account lockout, click "Unlock" and then click "Yes" in the modal window to confirm the operation.

SETTING UP ADMINISTRATOR ACCESS RIGHTS

Access rights of DLPS web interface administrators are distributed using roles. Rolebased division of rights is implemented by combining administrators into different groups. Each group has its own set of rights.

In the DLPS web interface, the "Groups" section is intended for working with administrator groups. The section displays a list of all groups and the rights assigned to them (see Figure 141).

	user 🕞	Groups		Create
Q	Chats	Name	Permissions	
Q	Personal files	superuser	Chats: write Personal files: write	/ 0
	Admins		Admins: write Groups: write	
1	······		Audit: write	
	Groups		Common: write	
U	Audit		Audit settings: write	
			Dozor: write InfoWatch: write	
U	Common		SearchInform: write	
0,	DLPS Authentication			
U	Audit settings			

Figure 141

To create a group:

- 1. Go to the "Groups" section.
- 2. In the upper right corner, click "Create".



A window for creating a group and setting its rights will open (Figure 142):

Name			
DAP Group			
uperuser			
Chats	no	read	write
Personal files	no	read	write
Admins	no	read	write
Groups	no	read	write
Audit	no	read	write
Common	no	read	write
DLPS Authentication	no	read	write
udit settings	no	read	write
Antivirus	no	read	write
Dozor	no	read	write
nfoWatch	no	read	write
Searchinform	no	read	write

Figure 142

The buttons have the following meanings:

- no the administrator does not have access rights to the DLPS web interface;
- read the administrator can only view the information in the section.
- write the administrator can view the information in the section and make changes to it.
- 3. In the "Name" field, enter the name of the group.
- 4. In the "LDAP Group" field, the name of the administrator group in Active Directory can be specified.

If the administrators of the group being created or edited are members of the specified group in AD, they will receive the rights of this group.

5. Set up access rights for the group.

To grant full rights to view and make changes:

- 1. Check the "Superuser" field.
- 2. Click "Save".

The created group will be displayed in the "Groups" window.

To edit a group, click **?**. Make changes in the window that opens and click "Save".

To delete a group, click \blacksquare . The button will be unavailable, if the group contains at least one administrator account.



SETTING UP LOADING OF DLPS ADMINISTRATORS FROM ACTIVE DIRECTORY

To set up loading administrator accounts from AD:

- 1. Go to the "Settings" \rightarrow "DLPS Authentication" section.
- 2. Fill in the fields of the form (see Figure 143):

DLPS Authenticatior	٦	
Address		
Port		
Base DN		
Search filter		
Admin login		
Admin password		

Password confirmation		

Enabled		
Save Check connection	Show admins	

Figure 143

The parameter values are provided by the Active Directory administrator (see Table 60).

Table 60

Parameter	Description
Address	Active Directory address
Port	AD connection port
Base DN	Directory object from which the search is performed
Search filter	Filter for searching in Active Directory
Administrator login	Login of the user who has read access to the list of users at the specified \ensuremath{DN}
Administrator password	Password of the user who has read access to the list of users at the specified DN
Password confirmation	Confirmation of the password of the user who has read access to the list of users at the specified \ensuremath{DN}

To enable/disable authentication of Active Directory administrators, check/uncheck "Enabled".

To test the connection to Active Directory, click "Test Connection".

To view the list of Active Directory administrators, click "Show Administrators".



AN ADMINISTRATOR ACCOUNT HAS BEEN DELETED

To delete an account, click \fbox in the entry information line (Figure 138), and then click "OK" in the modal window that opens.

MANAGING DLPS WEB INTERFACE SETTINGS

GENERAL SETTINGS

The "Settings" \rightarrow "General" (Figure 144) section allows you to enable and disable:

- DLPS;
- sending confidential data exchange mode audit events.

You can also set:

- audit log clearing schedule;
- the number of days after which the events in the log will be cleared;
- the time of inactivity of the administrator until the session is terminated.

user 🕞	Settings
Chats	DLPS enabled
Demonal films	Send stealth events
Personal files	Audit log cleaning schedule (cron format)
Admins	
Groups	Clear events older than the specified value in days. 0 clears all events
Audit	
	Administrator idle time before session termination (in seconds)
	1800
Common	
Common	Save

Figure 144

AUDIT SETTINGS

In this section, the administrator can configure which administrator action audit events will be displayed in the "Audit" section.

To set up audit settings:

- 1. Go to the "Settings" \rightarrow "Audit settings" section (see Figure 145).
- 2. Check/uncheck the boxes next to the events you want to enable/disable.
- 3. Click "Save".

The settings will be saved. For a description of event types, see the "Audit of DLPS Web Interface " section.



	user 🕞	Audit settings
Q	Chats	☑ dlps_admin_blocked
		✓ dlps_admin_unblocked
Q	Personal files	✓ dlps_admin_added_to_group
_	A destruction of	✓ dlps_admin_changed_audit_settings
	Admins	✓ dlps_admin_created
245	Groups	✓ dlps_admin_deleted
	Gloups	✓ dlps_admin_group_created
U	Audit	✓ dlps_admin_group_deleted
		✓ dlps_admin_group_updated
		✓ dlps_admin_logged_in
		☑ dlps_admin_logged_out
U	Common	dlps_admin_login_backoff_timeout
		☑ dlps_admin_login_op_disabled
Q_{i}	DLPS Authentication	☑ dlps_admin_login_op_failed
<u> </u>		dlps_admin_removed_from_group
	Audit settings	dlps_admin_updated_password
	Integrations	dlps_system_started
90	Chains	Save
U	Antivirus	

Figure 145

SETTING UP SEQUENCE OF CHECKS AND INTEGRATIONS

The administrator can configure the verification sequence in the "Chains" section, as well as directly configure the following integrations:

- integration with antivirus;
- integration with Sandbox;
- integration with DLP Solar Dozor;
- integration with DLP InfoWatch;
- integration with DLP Searchinform.

CHAINS

In this section, the administrator can configure the sequence of sending data transmitted in the system by users for verification. There are two sections available:

- Configuration of verification chains;
- Configuration of verification chains for files and messages sent within the contour.

Configuration of verification chains is responsible for the transmission of usersubmitted data:

- connected from the Internet;
- connected both from the Internet and from CTN without a configured access contour (for more information about the access contour, see the section "Setting Up Data Access contour").

Configuration of verification chains for files and messages sent within the contour is responsible for the sequence of verification of files sent from the CTN by users connected from the list of networks configured in accordance with the "Setting Up Data Access contour" section. User messages sent from the CTN are managed in the "Verification Chain Configuration" section.

Each section has three states available:

"Parallel";



- "Sequential";
- "Disabled".

When the integration is set to the "Parallel" state, the data transmitted in the system is received by each integration simultaneously.

When the integration is set to the "Sequential" state, the data transmitted in the system is received by each integration sequentially from the upstream to the downstream integration. If the upstream integration returns a deny response code, further transmission to downstream integrations is stopped.

The "Disabled" state allows you to prohibit transmission of data to the integration with this state.

When data is received by the DLPS service, it is simultaneously sent to the integrations with the "Parallel" and "Sequential" states; further, the process of data transmission in the integration is carried out according to the logic for each of the two states.

It is possible to enable the "In series" mode for messages and files transferred to the DLP system. The "In series" mode allows the DLP system to affect the ability of users to receive messages and files depending on their content (support for this function from the DLP system is required) (see Figure 146).

express	Chain configuration	n		
 Chats Personal files Admins Groups Judit 	Disabled	Parallel Ø Dozor Ø InfoWatch Ø Sandbox Ø Searchinform	Sequential Ø Antmaware	Block Mode Blocking mode is ignored during user interaction in network off
Settings U Common at DLPS Authentication U Audit settings	Save Chain configuration	n for files and messages set	nt inside contour	
Integrations	Disabled	Parallel	Sequential	Block Mode
% Chains		Ø Dozor	 Antimalware 	Blocking mode is ignored during user interaction in network
I Antivirus		Ø InfoWatch		off
U Dozor		Ø Sandbox		
InfoWatch		Ø SearchInform		
C Sandbox				
SearchInform	Save			

Figure 146

In case of a positive result of checking the message or file by the DLP system, the user is given the opportunity to receive the transmitted message or file. In case of a negative result of checking the message or file by the DLP system, the user is prohibited from receiving the transmitted message or file.

The "In series" mode is enabled separately for each of the chain sections. In the drop-down list "The "In series" setting is ignored for user interactions", the administrator can select one of the levels of exception for the application of this mode. The following values are available (see Table 61):

I ADIE 61	
TUDIC OF	

Value	Exception level
disabled	All messages and files transmitted in this chain are awaiting the result of the DLP system check
own server	Messages and files transmitted in chats that include only users of the CTS



	Value	Exception level
		server to which the custom DLPS is connected are transmitted without DLP system check. Messages and files transmitted in chats that include any other users are awaiting the result of DLP system check
	own and trust servers	Messages and files transmitted in chats that include only users of the CTS server to which the configured DLPS is connected, or that contain users from other CTS servers with whom direct trust connections are configured, are transmitted without DLP system check. Messages and files transmitted in chats that include any other users are awaiting the result of DLP system check
	any corporate server	Messages and files transmitted in chats in which users of any CTS server are members are transmitted without DLP system check. Messages and files transmitted in chats that include public users are awaiting the result of DLP system check

ANTIVIRUS

To set up connection to the antivirus via the ICAP protocol:

- 1. Go to the "Antivirus" section (see Figure 147).
- 2. Check the box "Antivirus enabled".
- 3. Set the following parameters (Table 62):

Table 62

Parameter	Description
ICAP host	IP address or FQDN of the antivirus
ICAP port	Port used by the ICAP antivirus service
ICAP service	Request modification service path. Specify the Request Modification (REQMOD) service path
Connection timeout (ms)	Timeout in milliseconds after which a connection attempt will be made again
Response wait timeout (ms)	Timeout in milliseconds to wait for a response with a verification code for the transmitted file
Request send timeout (ms)	Timeout in milliseconds during which a response is expected about successful receipt of a request to verify the transmitted file
Number of threads	The value is set depending on the available CPU resources

Note. The following antivirus response codes are used during setup: "204" -> no_virus_found; "200" -> virus_found.

4. Click "Save".



		Antivirus
	usei er	
0	Chats	Enabled
		Debug
Q	Personal files	ICAP host
	Admins	localhost
-	Groups	ICAP port
		1344
U	Audit	ICAP service
		reqmod
U	Common	Connect timeout (ms)
а,	DLPS Authentication	5000
	Audit settings	Timeout to check one file (ms)
v	Addit Settings	60000
	Integrations	Sand raquest timeout (ms)
0	Chains	10000
		10000
U	Antivirus	Number of files to be checked simultaneously
U	Dozor	2

Figure 147

SANDBOX

To set up connection to Sandbox via the ICAP protocol:

1. Go to the "Sandbox" section (see Figure 148).

		Sandbox	
	user		
2	Chats		
Q	Personal files	Client Hestnere	
	Admins	localhost	
容	Groups	ICAP host	
		localhost	
U	Audit	ICAP port	
		1344	
U	Common	ICAP service	
a,	DLPS Authentication	n reqmod	
		Connect timeout (ms)	
	Audit settings	5000	
	Integrations	Presive response timesut (ma)	
90	Chains		
č	onano	60000	
U	Antivirus	Send request timeout (ms)	
U	Dozor	10000	
	Info) Matab	Pool size	
	movvatch	2	
U	Sandbox		
·····		Save	
U.	Searchiniorm		

Figure 148

- 2. Check the "Enabled" box.
- 3. Set the following parameters (Table 63):

Table 63

Parameter	Description
ICAP host	IP address or FQDN of Sandbox
ICAP port	Port used by the ICAP Sandbox service
ICAP service	Request modification service path. Specify the Request Modification



	(REQMOD) service path
Connection timeout (ms)	Timeout in milliseconds after which a connection attempt will be made again
Response wait timeout (ms)	Timeout in milliseconds to wait for a response with a verification code for the transmitted file
Request send timeout (ms)	Timeout in milliseconds during which a response is expected about successful receipt of a request to verify the transmitted file
Number of threads	The value is set depending on the available CPU resources

Note. The following antivirus response codes are used during setup: "204" -> no_virus_found; "200" -> virus_found.

4. Click "Save".

SOLAR DOZOR

To set up integration with the Solar Dozor system:

1. Add the following parameters to the /opt/express/settings.yaml settings file located on the Back CTS server:

```
dlps_icap_client_host: 10.128.0.63
dlps_icap_client_port: 2344
dlps_icap_additional_headers:
    client_ip: 10.128.0.61
    server_ip: 10.128.0.63
    network_segment: CTS
    application: PROD
```

A description of the parameters is provided in Table 64:

Table 64

Parameter	Description
dlps_icap_client_host	IP of the Dozor server
dlps_icap_client_port	The port number on which the mailfilter component of Dozor software is running
server_ip	CTS or DLPS server address
client_ip	IP of the Dozor server

2. Run the following command:

dpl -d dpls

- 3. In the DLPS web interface, go to the "Integrations" \rightarrow "Dozor" section (see Figure 149.).
- 4. Check the "Integration with Solar Dozor Enabled" box and click "Save" (see Figure 149.).

Attention! Do not .change other settings and data in the fields.



		Dozor
	user 🕞	
Q	Chats	Enabled
		Debug
Q	Personal files	ICAP host
	Admins	
	Groups	ICAP port
		1344
U	Audit	ICAP service
		icap/fast
U	Common	Connect timeout (ms)
a.	DLPS Authentication	10000
	Audit settings	Receive response timeout (ms)
		120000
	Integrations	Band sourced discound from
	Obsiss	Send request timeout (ms)
30	Chains	60000
U	Antivirus	ICAP TCP Client pool size
Ū	Dozor	20
·	š	Additional headers
U	InfoWatch	
U	Sandbox	0
U	Searchinform	

Figure 149.

INFOWATCH

Attention! Before proceeding to configuration, it is necessary to acquire the DLPS plugin for integration with InfoWatch Traffic Monitor and the license file to this plugin from the developer.

To set up integration with InfoWatch:

- 1. Go to the "Integrations" \rightarrow "Infowatch" section (see Figure 150).
- 2. Check the "Integration with Infowatch enabled" box.
- 3. Set the following parameters (Table 65):

Table 65

Parameter	Description
Traffic Monitor host	IP address of the InfoWatch Traffic Monitor server
Traffic Monitor port	InfoWatch Traffic Monitor port number (by default $-$ 9101)
Traffic Monitor company name from the license file	The name of the company that has been licensed to use the Express integration plugin. See the data in the Infowatch Traffic Monitor interface (the value from the "Manufacturer" field in the "Plugins" section or the VENDOR parameter from the manifest.json file)
Traffic Monitor token from the license file	Token from plugin settings, see data in Infowatch Traffic Monitor interface
Traffic Monitor service name from the license file	Service name (SERVICE_MNEMO parameter from manifest.json file)

4. Click "Save".


6	press	
	user 🕞	InfoWatch
2	Chats	Enabled
Q	Personal files	Debug Host
	Admins	
-	Groups	Port
U	Audit	
	Settings	License company name
U	Common	License token
a,	DLPS Authentication	
U	Audit settings	License service name
	Integrations	
%	Chains	Save
U	Antivirus	
U	Dozor	
O	InfoWatch	
U	Sandbox	
U	SearchInform	

Figure 150

SEARCHINFORM

To set up integration with Searchinform:

- 1. Go to the "Integrations" \rightarrow "Searchinform" section (see Figure 151).
- 2. Check the "Integration with Searchinform enabled" box.
- In the "ICAP server URI" field, specify the value "icap://1.2.3.4:1344/icap/fast" (for an example, see Figure 151), where "1.2.3.4" is the IP address of SearchInform.

The remaining fields are optional.

4. Click "Save".



	press	
	user 🕞	SearchInform
9	Chats	Enabled
2	Personal files	CAP Server URI
	Admins	
~	Groups	Origin host
U	Audit	
		Client IP address
U	Common	Save
0,	DLPS Authentication	
U	Audit settings	
	Integrations	
°o	Chains	
U	Antivirus	
U	Dozor	
U	InfoWatch	
U	Sandbox	
U	SearchInform	

Figure 151

Chapter 4

TROUBLESHOOTING TYPICAL ERRORS

Note. All operations on the servers shall be carried out on behalf of the superuser.

eXpress CS supports the following message types (see Table 66):

Table 66

Error message	Value
403 Forbidden — You don't have access to view this page	The administrator does not have access rights
404 Page Not Found	The page is missing
413 Request is too large	Occurs if the administrator attempts to upload a file that is too large, for example, an avatar
500 Internal Server Error	Exceptional error

To obtain superuser rights, run the following commands:

sudo -s

eXpress CS is built on a microserver architecture using containerization based on Docker software. In eXpress CS, all maintenance operations and troubleshooting operations are performed with Docker containers.

In case of problems in the operation of eXpress CS, first of all it is necessary to check the operation status of the containers.

To check the status of containers ("Up" or "Exited"), run the following command:

docker ps -a --format "{{.Names}}: {{.Status}}"

The normal status of containers is "UP".

If a container has the "Exited" status, start it with the following command:

docker start <container name, for example "cts_containername_1">

If the problem has not been resolved, collect system logs.

To collect logs, run the following command:

```
cd /opt/express
```

dpl --dc logs --tail=1000 > logs.txt

Send the collected logs to the administrators responsible for eXpress CS.

If the user cannot log into the server, collect logs with the following command:

```
cd /opt/express
```

dpl --dc logs --tail=1000 ad_integration > logs.txt

To restart all containers, run the following command:

cd /opt/express
dpl --dc restart

If users have a problem with the order in which messages are displayed in conversations, check the time on the server with the following command:

date

If the time is incorrect, check the status of the chronyd time service. **To check the status of the time service**, run the following command:

systemctl status chronyd

If the status "active" has the value of "inactive", start the service with the following command:

systemctl start chronyd

Table 67 shows possible errors that may occur in the event of an incorrect combination of user registration settings:

Table 67

No.	Description of the combination of settings	Description of consequences
1.	The "Phone and Credentials" button is disabled in the build, and the "Registration without Telephone Number is Allowed" option is disabled in the administrator web interface.	Thus, both registration methods are prohibited. Only those users who have previously added their telephone number to their profile via a redirect to SMS input will be able to access the app
2.	All buttons except for "Phone and Credentials" button are disabled in the build, and adding the telephone number is disabled in the administrator web interface	The users who have not added their telephone number to their profile will not be able to log into the app.
3.	In the administrator web interface, registration without the telephone number has been disabled without prior notification to users about the need to add their telephone number	The users who have not added their telephone number to their profile will not be able to log into the app
4.	Users were initially registered on a public server, after which they were asked to log in using their credentials via "Corporate E- Mail" or "Corporate Server Address"	In this case, the users have two accounts: a public one with the telephone number and a corporate one without the telephone number. It is technically impossible to combine the two into one. The only way out of this situation is to add the same telephone number to the corporate account and delete the public account, losing all correspondence.
5.	In the branded build, all buttons are disabled except for "Phone and Credentials", and in the administrator web interface, the users are allowed to delete their telephone number	A user who has deleted their telephone number will not be able to log into the app
6.	In the administrator web interface, registration without the telephone number is prohibited, but the users are allowed to delete their telephone number	A user who has deleted their telephone number will not be able to log into the app



CHANGE HISTORY

The "Change History" section contains a list of changes in the document related to changes/modifications of eXpress CS.

Build 1.47

No.	Section	Change	Reference
1.	Administrators	The ability for an administrator to be a member of multiple groups has been added	page 66
2.	Administrators	Granting administrator rights based on group membership in AD. If the administrators of the group being created or edited are members of the specified group in Active Directory, they will receive the rights of the corresponding AD group.	page 66
3.	Calls	Call logging has been added	page 75
4.	Servers	TTS description has been added	page 21
5.	Servers	Description of the graphical connection routing diagram has been added	page 24
6.	Server	The setting for administrator name visibility has been added	page 25
7.	Server	Administrator data setup capability has been added	page 25

Build 2.0.0

No.	Section	Change	Reference
1.	Chats	Viewing of chat events has been added	page 87

Build 2.1.0

No.	Section	Change	Reference
1.	Setting up Calls VoEX Server	The fields in SIP integration settings have been changed	page 34

Build 2.5

No.	Section	Change	Reference
1.	Contacts Management	Information about authorization using Open ID has been added	page 12
2.	Description of administrator web interface	Description of menu items and operations available in the administrator web interface have been supplemented	page 14
3.	Users	Information about authorization using Open ID has been added	page 37
4.	Creating an account	Information about authorization using Open ID has been added	page 38
5.	Setting Up Registration	The section and subsections have been added	page 37
6.	Setting Up Visibility of User Profile Fields	Added	page 46
7.	Setting Up Administrator Rights	Illustrations have been updated, description of administrator rights has been supplemented	page 66
8.	Server Management	Illustrations have been updated, and a description of the data for integrators has been added	page 17
9.	Managing Stickers	Illustrations have been updated, description of operations has been supplemented	page 121
10.	Managing SmartApps	Added	page 102
11.	Setting Up Event	Illustrations have been updated, information on	page 112



No.	Section	Change	Reference
	Information Transmission	working with SIEM has been added	
12.	Audit of administrator and user actions	Graphics have been updated, the list of audit events has been supplemented	page 114
13.	Catalog	Added	page 86
14.	Index retention period in Elasticsearch	Deleted	

Build 2.5.7

No.	Section	Change	Reference
1.	Creating an account	Requirements for user avatars were added	page 38
2.	Server Settings	Information has been updated	page 25
3.	Connecting the SMTP Server	Added information in the "E-mail Settings" list	page 35
4.	Sending instructions for getting started with the application	The figure has been updated	
5.	Chatbots	SmartApp description has been moved to the "Managing SmartApps" section	
6.	Setting Up Administrator Authentication	The figure has been updated, a menu item was renamed in the text	
7.	Server Settings	The figure has been updated. Information about Trust search has been added	
8.	Setting up Calls VoEX Server	The figure has been updated	
9.	Managing SmartApps	Updated	
10.	Chats	Updated	

Build 2.6.0

No.	Section	Change	Reference
1.	Open Chats	Optimization description has been added	page 92
2.	Managing Additional Support Settings	Added	

Build 2.7.0

No.	Section	Change	Reference
1.	Chats	The note regarding hyperlinks has been added	page 87
2.	Open Chats	-	page 92
3.	Calls		page 75
4.	Setting Up Administrator Rights	Updated	page 66
5.	Managing Additional Support Settings	Moved to the "Server Management" section	

Build 2.9.0

No.	Section	Change	Reference
1.	Description of CONFERENCE BOT	Updated	page 100
2.	Setting Up E-mail	The regular expression example has been added	
3.	Calls	Updated	page 75



Build 2.10.0

No.	Section	Change	Reference
1.	Managing SmartApps	Updated. The note about home page has been added	page 102

Build 2.11.0

No.	Section	Change	Reference
1.	Chats	The note concerning the limitation in chat management has been added	page 91

Build 2.12.0

No.	Section	Change	Reference
1.	Audit of administrator and user actions	Events have been added to the table	page 114
2.	Requests to Exit from The Corporate Server	The note has been added	page 51

Build 2.13.0

No.	Section	Change	Reference
1.	Creating an account	Graphics have been updated	page 38
2.	Setting up an Account	Graphics have been updated	page 41
3.	Calls and Conferences	Updated	page 75

Build 3.1.0

No.	Section	Change	Reference
1.	Server Settings	Updated	page 25
2.	Links to chats/calls	Subsection added	page 84

Build 3.2.0

No.	Section	Change	Reference
1.	Links to chats/calls	Updated	page 84

Build 3.3.0

No.	Section	Change	Reference
1.	Chats	Information about exporting the list of users in CSV format has been added	page 87
2.	Open Chats		page 92
3.	Calls and Conferences		page 75
4.	Chatbots	Information about setting up a chatbot search has been added	page 95
5.	Server Settings	Information on setting up end-to-end encryption in group chats and channels has been added	page 25



No.	Section	Change	Reference
1.	File Service	Information about enabling proxy settings when distributing statics has been added	page 110

No.	Section	Change	Reference
1.	Setting Up the Server	Information about the "Update Notification" and "Maintenance Notification" blocks has been added	page 25
2.	Creating an account	Information about the possibility of editing the public name has been added	page 38
3.	Managing SmartApps	The "Proxy Smartapp_proxy" subsection has been added	page 105
4.	Setting Up Data Access contour	The description of "trust" and "local" settings has been added: files cannot be sent to open chats/channels and to chats with disabled end-to-end encryption	page 108
5.	Additional Capabilities	The dlps_allow parameter has been removed	

Build 3.7

No.	Section	Change	Reference
1.	Setting Up the Server	Information about the settings of the "Update Notification" and "Maintenance Notification" blocks has been added	page 25
2.	Global Chat	The Global Chat section has been added	page 94
3.	Internal Bots	The description of Notifications bot has been added	page 101

Build 3.8

No.	Section	Change	Reference
1.	Setting Up Data Access contour	Updated	page 108
2.	Setting Up OpenID	Updated	
3.	Setting up "Send To" menu	Updated	
4.	Setting up Calls VoEx Server	Updated	

Build 3.9

N o.	Section	Change	Reference
1.	Links to chats/calls	Description has been supplemented, Table 33 has been updated	page 84
2.	Setting Up Data Access contour	The "Who can read CTN files" parameter has been edited	page 108
3.	Chatbots	Moved to the "Chat and Bot Management" section	page 95
4.	Connecting a Chatbot	APP_ID field description, Table 42 have been supplemented, illustrations have been updated	page 95
5.	DLPS Service	Illustrations have been updated The "Managing DLPS Web Interface Settings" section has been updated, the "Setting Up Integrations with DLPS" section has been added	page 126



No.	Section	Change	Reference
1.	Users	Table 12 has been updated, the description of the "Source" field has been supplemented	page 37
2.	DLP Service	 The structure has been updated. The following subsections have been added/supplemented: Personal Files; Audit of DLP Web Interface Events; Managing Administrator Accounts; Managing DLPS Web Interface Settings 	page 126

No.	Section	Change	Reference
1.	Chatbots	The description of the Icon field in the Send to menu setting has been added	
2.	Chatbots	"Setting Up Action on the Contact Card" subsection has been added	
3.	Setting Up Integrations with DLPS	The note containing antivirus response codes has been added	page 141

Build 3.12

No.	Section	Change	Reference
1.	Server Settings	The notification setting for maintenance work has been updated	page 29

Build 3.13

No.	Section	Change	Reference
1.	Server Settings	The notification setting for maintenance work has been updated	page 29

Build 3.14

No.	Section	Change	Reference
1.	Calls and Conferences	The "Conferences" section has been updated: descriptions of the "Conference Name" and "Conference ID" columns have been added	page 75
2.	Throughout the document	The description of integration with Vinteo and Mind has been removed	

No.	Section	Change	Reference
1.	Introduction	Updated due to the separation of the Administrator's Guide into volumes	page 6
2.	Main Components	Links to volumes devoted to ETS and RTS operation have been added	page 8
3.	Setting Up Active Directory	Step 3 of the procedure for setting up registration with Active Directory has been updated	
4.	Setting Up Calls VoEx Server	This section has been updated. Descriptions of Janus instances and user settings have been added. Description of VoEx server settings has been updated	
5.	Calls and Conferences	The section interface figure has been updated	



No.	Section	Change	Reference
6.	Call and Conference Management	A description of settings for call quality rating filter has been added	page 76
7.	Support Contacts Management	User support contact management section has been updated	
8.	Role Model and User Groups	A section describing the application of the role model has been added	page 54
9.	Registration Systems	The section has been added	page 12
10.	File Service	The figure has been updated	page 110
11.	Internal Bots	Description of Recordings bot has been added	page 102

No.	Section	Change	Reference
1.	Audit of administrator and user actions	System event "deleted_by_admin" => true, which registers the deletion of user messages by the chat administrator, has been added	page 114

Build 3.18

No.	Section	Change	Reference
1.	Setting Up Janus Instances	A note about overall Janus server load has been added	page 31
2.	Throughout the document	Module name has been corrected from DLP to DLPS	

Build 3.19

No.	Section	Change	Reference
1.	Operations with a Specific User Account	The description of the "Activations" operation has been updated	page 43
2.	Setting Up Event Information Transmission	Configuration description has been updated	page 112
3.	Links to chats/calls	A note about creating a link for guest access has been added	page 84
4.	Role Model and User Groups	A section describing the application of the role model has been added	page 54
5.	Operations with User Groups	A note about required fields when creating a user group has been added	page 57
6.	Setting Up Antivirus, DLP and Sandbox Integration	The section has been updated and supplemented with descriptions of the "Chains" subsection and integration with Sandbox	page 139
7.	Internal Bots	Description of Recordings bot has been added	page 102

Build 3.20

No.	Section	Change	Reference
1.	Setting Up Registration	The "Registration without Telephone Number" subsection has been added.	
2.	Setting Up Registration	The "Setting Up E-mail" subsection has been added	



No.	Section	Change	Reference
1.	Operations with User Groups	A description of restrictions for user groups when working with SmartApp has been added	page 55
2.	Setting Up the Display in the Main Menu	The section has been updated. A description of SmartApp display for user groups has been added, images have been updated	page 102

No.	Section	Change	Reference
1.	Throughout the document	VoEx server changed to Media server	
2.	Main Components	Due to changes in the system architecture, the Media server is used instead of the VoEx server to provide video and voice communications	page 8
3.	Operations with User Groups	A note about the specifics of setting up the connection type has been added	page 55

No.	Section	Change	Reference
1.	Sending instructions for getting started with the application	The subsection has been updated, a note has been added about the need to fill in the body of the letter	page 48
2.	Sending Notifications about User Lockouts	The subsection has been updated, a note has been added about the need to fill in the body of the letter	page 50



No.	Section	Change	Reference
1.	Description of Administrator Web Interface	The subsection has been updated, the figure has been replaced, a description of the "Call Ratings" and "Call Recordings" sections has been added to the table	page 14
2.	Call Recording	Subsection added	page 80

Build 3.26

No.	Section	Change	Reference
1.	Setting Up Registration	The section has been completely transferred to the document "Volume 1. "Administrator's Guide. Installation".	
2.	Description of Administrator Web Interface	Table 2 has been changed.	page 14
3.	Throughout the document	A definition of VoEx (Voice Over Express) — part of Express CS, which includes call management, call recording, SIP telephony, and integration with other types of telephony — has been added	
4.	Throughout the document	The document structure has been optimized	
5.	Additional Capabilities	The section has been removed. Information contained therein has been transferred to the document "Volume 1. "Administrator's Guide. Installation".	
6.	Eliminating Vulnerabilities	The section has been completely transferred to the document "Volume 1. "Administrator's Guide. Installation".	
7.	Call Quality Ratings	Subsection added	
8.	Throughout the document	The figure have been updated	
9.	Viewing Account Information	A note about updating the user profile has been added	page 37
10.	Operations with User Groups	A table with a description of the fields of the group creation form has been added	page 55
11.	Setting Up Administrator Rights	Table 26 has been updated	page 66

Build 3.27

No.	Section	Change	Reference
1.	Main Components	The description of the Transcoding server has been added	page 8
2.	Available Roles	A description of the new restrictions has been added	page 11
3.	Requests to Exit from The Corporate Server	The section has been updated	page 51
4.	Role Model and User Groups	The section has been updated. A description of the process for creating new rule types has been added	page 54
5.	Global Chat	The section has been updated	page 94
6.	Global Bots	A description of global bots has been added	

No.	Section	Change	Reference
1.	Deleting an Account	The section has been updated	page 46
2.	Sending instructions	Note about new users has been added	page 48



No.	Section	Change	Reference
	for getting started with the application		
3.	Role Model and User Groups	The section has been updated. A description of the process for creating new rule types has been added	page 54
4.	Setting Up Administrator Rights	Table 26 has been updated	

No.	Section	Change	Reference
1.	Setting Up Records Retention Period	The figure has been updated	page 82
2.	Setting Up File Storage Periods	The figure has been updated	page 109

Build 3.30

No.	Section	Change	Reference
1.	Setting up "Send To" menu	The section has been removed	
2.	Setting Up Action on the Contact Card	The section has been removed	
3.	Requests to Exit from The Corporate Server	Information about user marking has been updated	page 51

Build 3.31

No.	Section	Change	Reference
1.	Deleting an Account	Information has been updated	page 46
2.	Call and Conference Management	The figures have been updated, and information about searching for calls and conferences has been updated	page 75
3.	Changing Chatbot Parameters	The figure and information in the table have been updated	page 96
4.	Chains	The section has been completely updated	page 139
5.	Internal Bots	The figure has been updated	page 99
6.	Description of Poll Bot	The section has been added	page 102

Build 3.32

No.	Section	Change	Reference
1.	Server	The figure has been updated	page 25
2.	Update Notification	New information has been added	page 30

No.	Section	Change	Reference
1.	Authorization in the ADMINISTRATOR WEB INTERFACE	The figure has been updated	page 13
2.	Description of Administrator Web Interface	The figure has been updated, the table has been updated and supplemented	page 14
3.	Setting Up Janus Instances	The figure has been updated	page 31



No.	Section	Change	Reference
4.	List of Change Requests	The section has been added	page 53
5.	Support Contacts	Moved from the section "Support Contacts Management"	page 54
6.	Additional settings	The section has been added	page 126
7.	Server	The figure has been updated	page 25
8.	Server Features	Information about new settings has been supplemented	page 28

No.	Section	Change	Reference
1.	Description of Administrator Web Interface	Table updated	page 14
2.	Setting up TURN Server and STUN Server and the VoEx Local Network	Figure updated, information on settings added	page 33
3.	Setting Up Administrator Rights	Figure and table updated	page 66
4.	Call Quality Ratings	Table updated	page 83
5.	Description of Conference Bot	Information has been updated	page 100
6.	Mobile application menu configuration	The section has been added	page 105
7.	Setting up menu configuration for web and desktop apps	The section has been added	page 107
8.	DLPS web interface event audit (Audit)	Figure and table updated	page 131
9.	Managing DLPS web interface settings	Figure and information updated	page 133
10.	Audit Settings	The figure has been updated	page 138

Build 3.35

No.	Section	Change	Reference
1.	Setting up SIP telephony	Table and figure updated	page 34
2.	Operations with Rules	The figure have been updated	page 58
3.	Audit of administrator and user actions	Audit log event table updated	page 114
4.	DLPS web interface event audit (Audit)	Audit log event table updated	page 131
5.	Audit Settings	The figure has been updated	page 138

No.	Section	Change	Reference
1.	Description of Administrator Web Interface	Information about profile edit button added	page 14
2.	Setting up TURN Server and STUN Server and the VoEx Local Network	Information about the "List of servers that will use the internal janus host (comma separated)" field updated	page 33



No.	Section	Change	Reference
3.	Editing an Account	Information about the possibility of changing the avatar by the user added	page 42
4.	Operations with a Specific User Account	Figure updated, information about the "Device hostname" field added	page 43
5.	Setting Up Visibility of User Profile Fields	Information on access levels updated	page 46
6.	Prohibition of downloading attachments from CTS users;	Figure updated, information about the "Exception chats" field added	page 60
7.	Editing Administrators	2 editing method added	page 72
8.	Mobile application menu configuration	Figure updated, description expanded	page 105
9.	Audit of administrator and user actions	Audit log event table updated	page 114