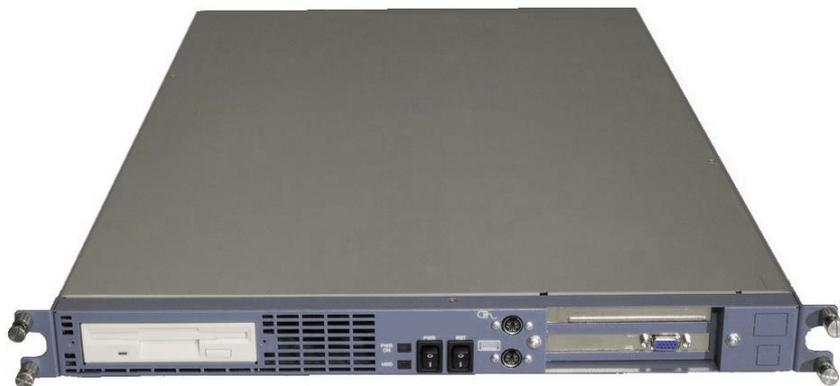




TrueConf Server

Video Conferencing System

Administrator Guide



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About this document

This document is part of **TrueConf Server** video conferencing system documentation package and contains instructions on installation, setting up and use of the system's server part.

For effective work with the document basic level of IT and network literacy is required.

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1 General Information

1.1 TrueConf Server Components

1.1.1 Server Side

- TrueConf Server;
- TrueConf Manager.

1.1.2 Client Side

- TrueConf Client.

Note: See *TrueConf Client application user guide* to learn how to install and configure TrueConf Client application.

1.2 TrueConf Server Components Description

1.2.1 TrueConf Server

This component is a software video server. It gets installed as Windows operating system service and provides:

- Client authentication and authorization;
- Client connection, including connection through NAT's and proxy servers;
- Media stream retranslation when direct stream translation is not possible;
- Communication between remote servers connected to the option "Roaming";
- Storing the call history.

1.2.2 TrueConf Manager

This component is dedicated to server component configuring.

TrueConf Manager provides:

- Server registration, start, stop and state monitoring;
- Server log viewing;
- Server IP-address and port set-up;
- Registration of new users, activation and deactivation;
- Revision of support information.
- Group conferencing of different modes.

1.2.3 TrueConf Client

This is a client application. It is installed on the users' computers and allows making and receiving of video calls.

TrueConf Client provides:

- User authentication in the TrueConf Server system;
- Possibility to make video calls or create and participate in various group video conferences.
- Set up of video and audio input and output;
- Exchange of text messages;
- White board tool for 1- on -1 conferences;
- Slide show tool for displaying of graphic images in 1-on-1 and group conferences;
- Screen sharing for transmission of your desktop screen to one or more participants.
- File transfer in 1-on-1 video calls;
- User address book support and management;
- Call list management;
- Self view display in conferences;
- Support of 320×240, HQ (640×480) video formats HD (720p) quality in 1-on-1 video conferences;
- Video and/or audio mute feature;
- TCP and UDP transport.

Note: You can find information on how to connect client application to server in the "SIP Gateway Tab" section of this document

1.3 Recommended configuration for TrueConf Server system server

- a Dual Core processor
- 1GB RAM
- 20Gb free hard disk space
- 100 Mbit/s Ethernet
- MS Windows Server 2000/2003/2008 operating system.

1.4 Recommended configuration for TrueConf Server client terminal

- Intel or AMD Processor with 2 GHz or higher clock speed
- 512 MB of RAM and 100 MB free hard disc space
- Windows 2000/XP/Vista/7 operating system
- 256 kbps network connection in both directions
- Webcam
- Full-duplex sound card
- Headset (in order to avoid echo)

1.5 Recommended configuration for the use of HQ mode

- Windows 2000/XP/Vista/7 operating system
- CPU: Intel Core 2 Duo E6400 / AMD 64 X2 4200+
- 1GB RAM
- DirectX 9c compatible video card (at least 256 MB RAM)

Note: To learn more about the use of TrueConf Server client application please refer to the “Client Application Manual” which is also included into the system documentation package.

2 Server setup in five minutes

When TrueConf Server software is installed and server computer is connected to the network, then the rest of server configuration will take about 5 minutes.

Step 1

Install TrueConf Server software.

Step 2

TrueConf Server Setup program will start after installation.

Step 3

Register the server. To do that enter you registration code. If you are installing server behind the firewall, then in order to complete the registration you should open port 4310 access from inside to internet.

Note: For more information see the “Registering the Server” section

Step 4

The server will start using all computer IP addresses on a default TrueConf port - 4307. If you are installing the server behind the firewall or NAT, and some clients will be using the server outside the firewall or NAT, you should open and/or forward port from client connections.

Note: For more information see the Network tab section.

Step 5

Wait till the server starts and the status bar shows the corresponding message («Server is working»), and status indicator in lower right corner to become green.

Step 6

Go to the “User Accounts” tab and add the desired users.

Note: For more information see the “User Accounts” section.

Step 7

Get the client application installer ready.

To do that, go to the “Application” tab and press “Browse” button. Here select the folder where the client application files, containing all required information to connect to this video server, will be placed (it will be shown in the “Path” text box). Press “Make Installer” button.

Step 8

Install the application on the client computers using generated installer files.

Note: For more information see the SIP Gateway Tab section.

TrueConf Server is ready to work.

Now you can configure other server settings. You can find description of other server manager tabs later in this document.

3 Server installation

To install the server components use your installation package.

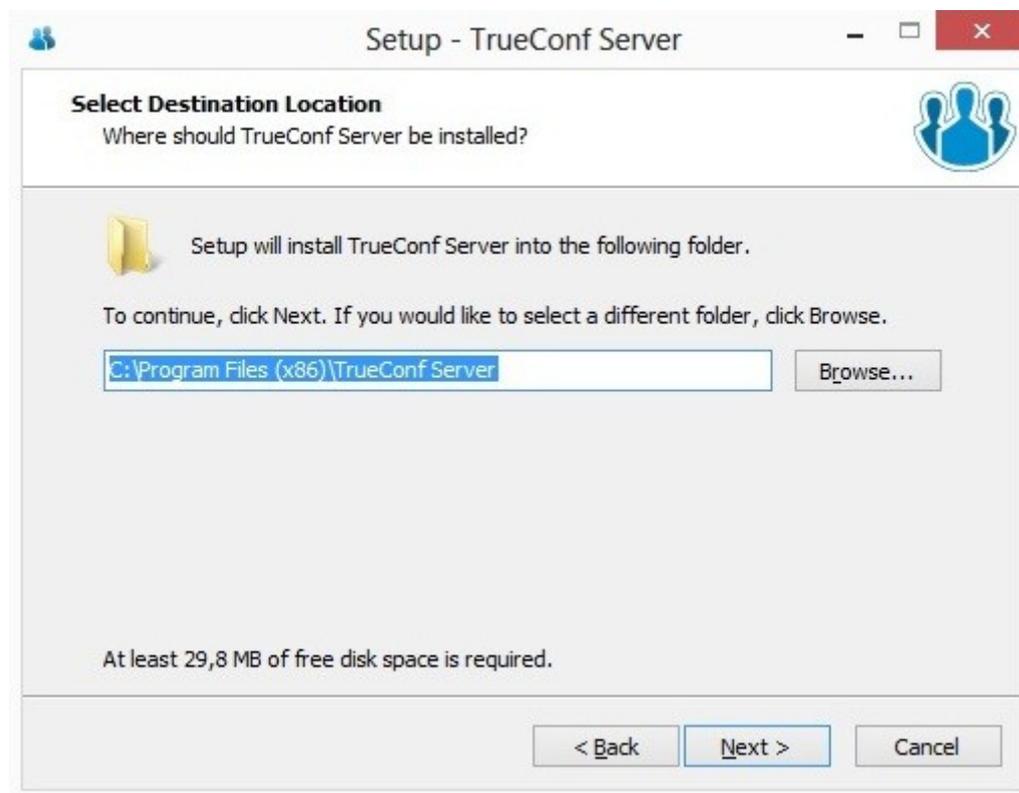
You will need a registration code.

3.1 Software installation

Locate and run installation package
Follow the installation prompts.

3.2 Server work directory selection

Here select the server's installation directory (e.g. C:\Program Files\TrueConf Server\) and press "Next" button.



After the installation finishes, you will have an option to launch TrueConf Manager.

4 Registering the Server

The server should be registered and activated in the TrueConf system.

Note! Server does not work when unregistered!

To register the server you need a registration code.

Follow the steps to register the server:

1. Launch TrueConf Manager.
2. For successful registration open internet access to port 4310.
3. If this is the first registration, the following registration dialog window will open.



Enter your registration code and specify your server name. The server name should be unique.

If you don't have the registration code, you can get it using «Get Registration Code» button

Note: to register the server for a second time press "Register" button in the "About" tab.

4. If internet connection is working and registration is successful the following window will appear:

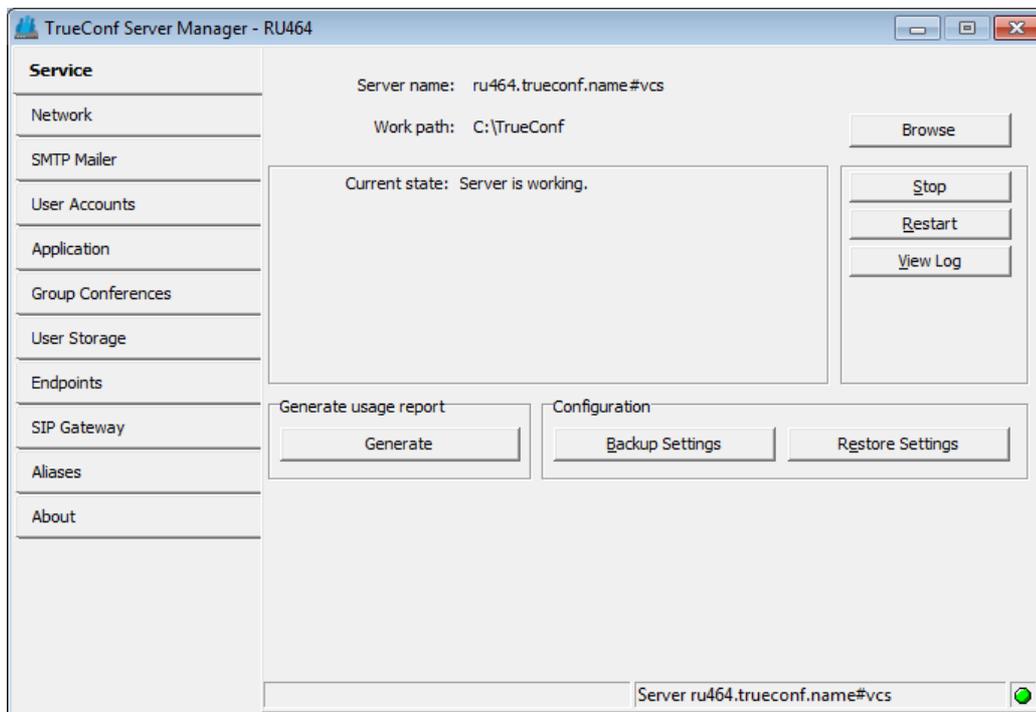


5. Now TrueConf Manager will automatically restart. The server is registered and ready to work.

5 Configuring Server

5.1 Service tab

This tab's elements allow the server to start and stop, makes possible the configuration backup and restoration, viewing of server statistics and logs.



Setting	Description
Server name	This is the server unique name, specified during the registration. It identifies the server in the TrueConf server network.
Work path	Server work directory, logs are saved here.
Generate (usage report)	Creates an html-document with a list of statistical reports for each month. Each report consists of two parts: part 1 - detailed information about each conference, part 2 - information about conferences, grouped by user.
Start (Stop)	Starts or stops the server service
Restart	Restarts the server service
View Log	Opens the server log viewer
Backup Settings	Backs up the server configuration to a file

Restore Settings	Restores server configuration from the file
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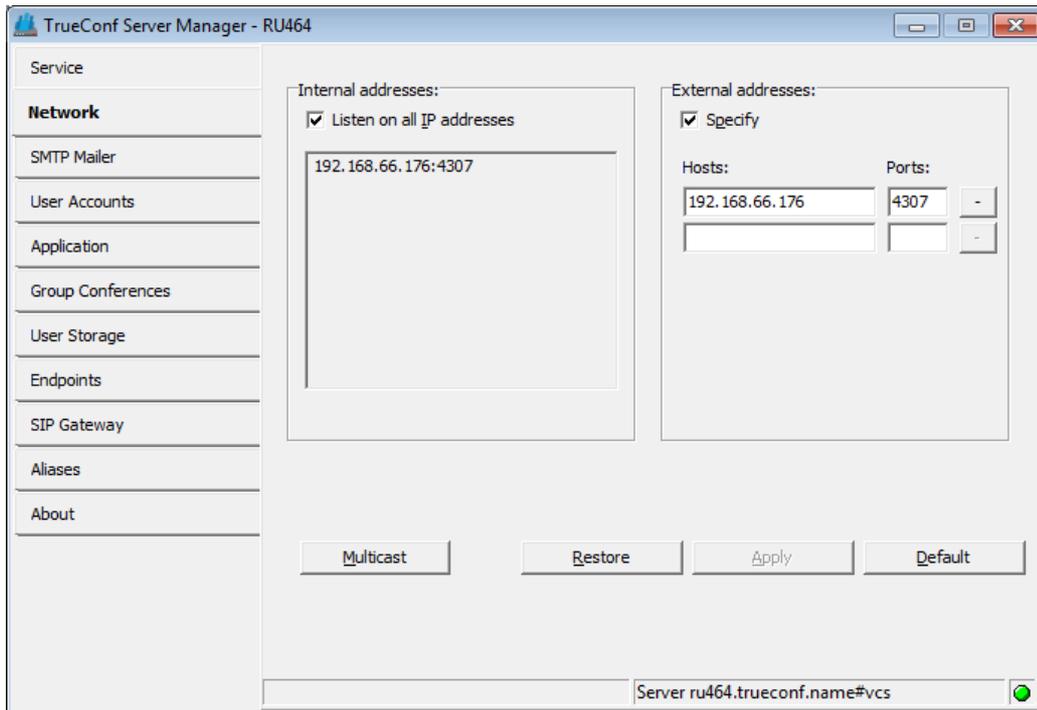
5.1.1 Common elements

These elements appear on most tabs of the TrueConf Manager

Current state	<p>Current state indication, can be the following:</p> <ul style="list-style-type: none"> • Server is starting; • Server is working; • Server is stopping; • Server is not working.
Restore	Restores the latest saved settings on this tab.
Default	Sets the default settings in this tab
Apply	Saves all settings made in this tab
Current server	The server name is displayed here
Color indicator in the lower right corner	<p>Indicator reflects the current server state when server is installed as Windows service</p> <ul style="list-style-type: none"> • Red – server has stopped; • Yellow –starting or stopping; • Green – server is working.

5.2 Network tab

In this tab the network settings can be changed.:

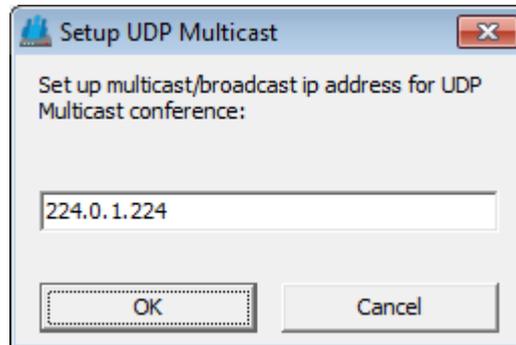


Setting	Description
Internal addresses	<p>IP-addresses and ports that will be used for clients to contact this server. By default the server uses all IP addresses of machine on default TrueConf port 4307.</p> <p>When default settings are on, current connections are displayed in this column.</p> <p>To change internal addresses, uncheck “Listen on all IP addresses” checkbox.</p>
External addresses	<p>External addresses are the ports and IP addresses or DNS names, which help client applications to connect to the server. If the server uses NAT or has DNS names, external addresses can differ</p>

	<p>from the internal ones.</p> <p>DNS names can be used for host identification. When using addresses and/or ports translation (NAT), translated address and port must be entered into the relevant fields.</p> <p>If you plan to transfer server to another IP address, you need to enter the future IP address and relevant port into the right column. This will help users to store the future IP address during the next session. When the server is switched to the new address, users will switch to it automatically.</p> <p>To specify non-default external addresses, check “Specify” checkbox.</p>
Multicast	Opens “Setup UDP Multicast” window (see below).

5.2.1 Setup UDP Multicast window

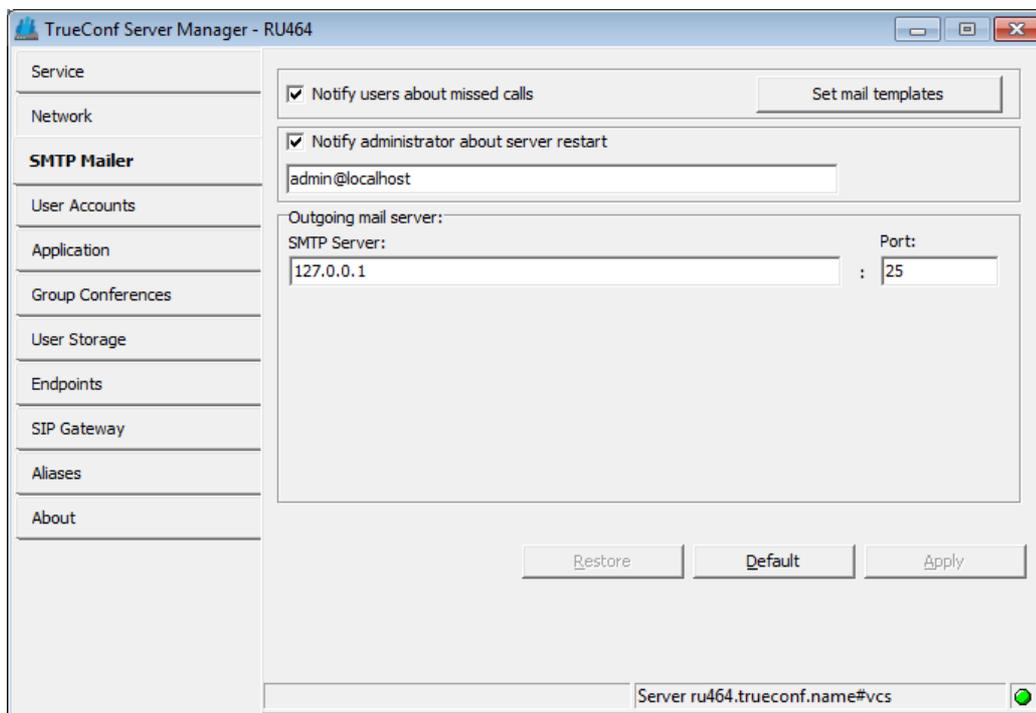
This window allows setting up of multicast/broadcast IP address and ports, used in UDP Multicast conferences. You may choose it in format **<ip_address>:<first_port>-<last_port>**. Example: **224.0.1.224:4000-6000**. Default ports are 4000-6000. If needed the same IP address should be set in IGMP settings of the hubs or switches in your network.



Setting	Description
Set up multicast / broadcast IP address for UDP Multicast conferences	Multicast or broadcast IP address
OK	Press the UDP Multicast Setup button to close dialog and save the settings.
Cancel	Press the UDP Multicast Setup button to close the dialog and discard the settings.

5.3 SMTP Mailer tab

Mail server is used to send notifications to the users about missed calls and to the TrueConf system administrators about the server operation.

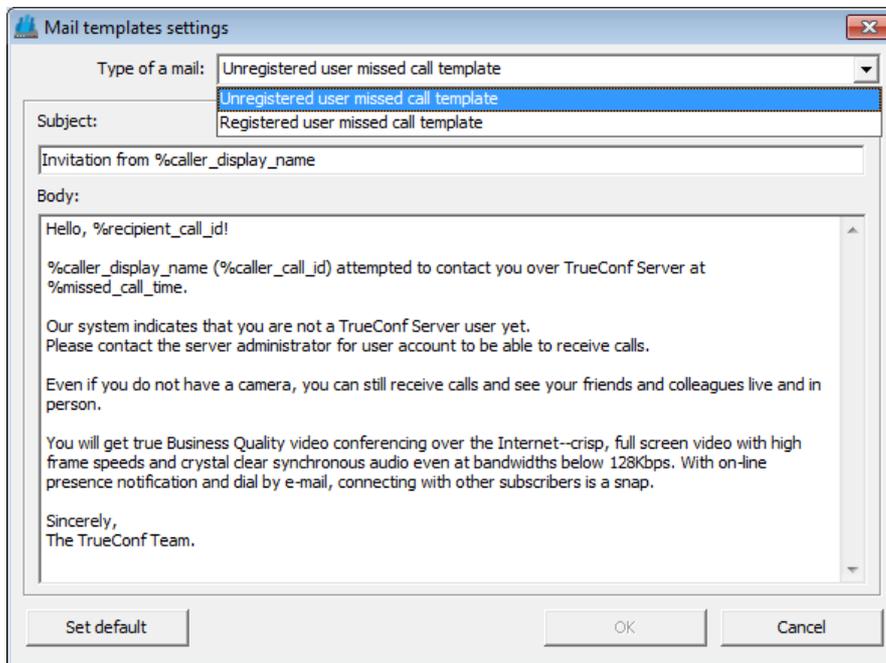


Setting	Description
Notify users about missed calls	Allows the server to send Missed Calls notifications by e-mail
Set mail templates	Open «Mail templates settings» dialog. In that window you can edit missed calls mail template.
Notify administrator about server restart	Allows the server to send notifications by e-mail in case of restart of the service.
SMTP Server, Port	IP address or hostname of the SMTP server used by the TrueConf Server.

Note: IP address 127.0.0.1 means that you are using SMTP server on the same computer as TrueConf Server. In this case you will be prompted to verify SMTP server installation on this computer.

5.3.1 Mail templates settings dialog

In case of a missed call to a registered or unregistered user of TrueConf Server this event will be logged on the server and user will be notified by predefined e-mail.



Note: Server logs time of the call, name of the caller, username. This information is substituted by the server in the template using tags:

- %recipient_display_name – name
- %caller_display_name – display name of the caller
- %caller_call_id – id of the caller
- %missed_call_time – time of the call

Setting	Description
Type of mailing	You can choose between templates for this event types: <ul style="list-style-type: none"> • Registered user missed call template – mail template that will be send to the registered user • Unregistered user missed call template – mail template that will be sent to the unregistered user
Subject	Subject of the mail. In a pull down menu «Type of

	<p>mail» you can choose :</p> <ul style="list-style-type: none">• Missed call from %s – subject for the registered users.• Invitation from %s – Subject for non registered users.
Body	Editable templates are shown according to the active «Type of mail».
Set default	By pressing this button you will get the default templates restored.
OK	Press this button to close dialog and save the settings.
Cancel	Press this button to close dialog and discard the settings.

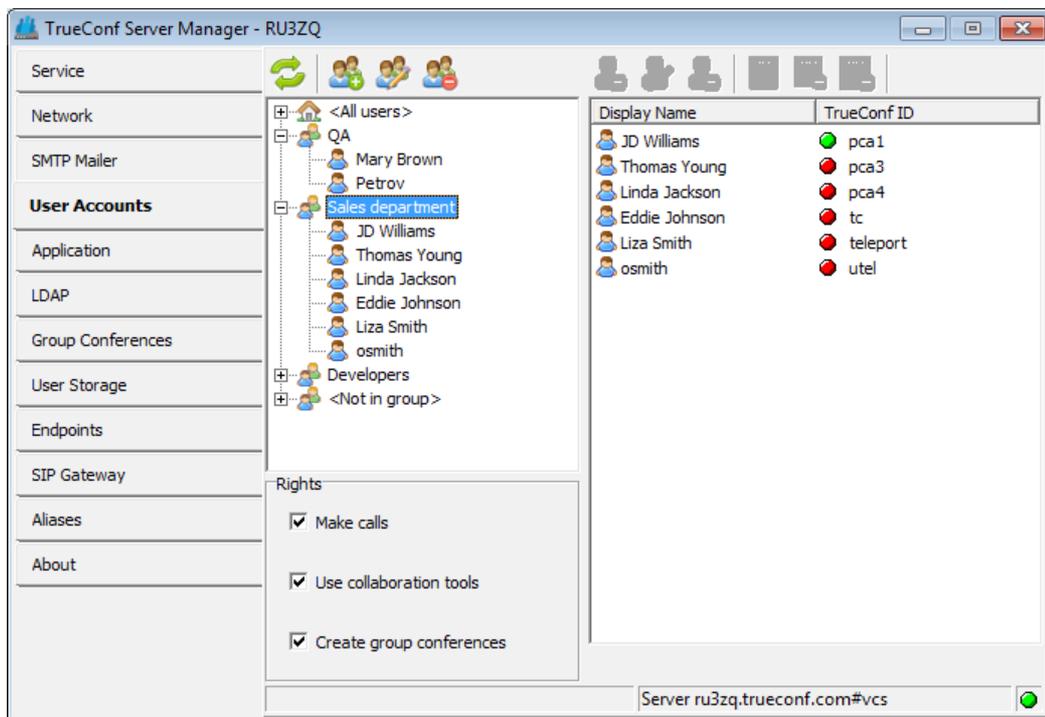
5.4 User Accounts tab

Directory of groups and users registered on the video-conferencing server.

This tab allows to create and manage the user's groups.

User Accounts tabs allows creating groups and managing rights. In the Registry mode a user can belong to one of the created group. You can edit his/her attributes in the Edit user information window. In the LDAP mode this window allows to define rights for several LDAP groups. User attribute can be defined in the LDAP folder.

Note: On the server the *<Not in group>* is created by default.



Element	Description
	Refresh groups and users
	Add user group. In the Registry mode you need to define the unique name of the new group, while in the LDAP mode you need to choose the existing group from the LDAP folder
	Edit user group
	Delete user group
	By pushing this button you open the dialog where

	you can add a new user
	By pushing this button you open the dialog where you can edit information about the user
	Will delete current user
	Address book stores your contacts of the corporate group
	Add user to the address book
	Delete user from address book
Make calls	Users can video call each other
Use collaboration tools	Group users can use collaboration tools
Create group conferences	Group users can conduct standard group video conferencing
Automatically manage address book	Allows to automatically add users to all personal address books. This function usage is not recommended when the number of users is more than 100.

Changes in the rights of the group take effect immediately after you tick the rights.

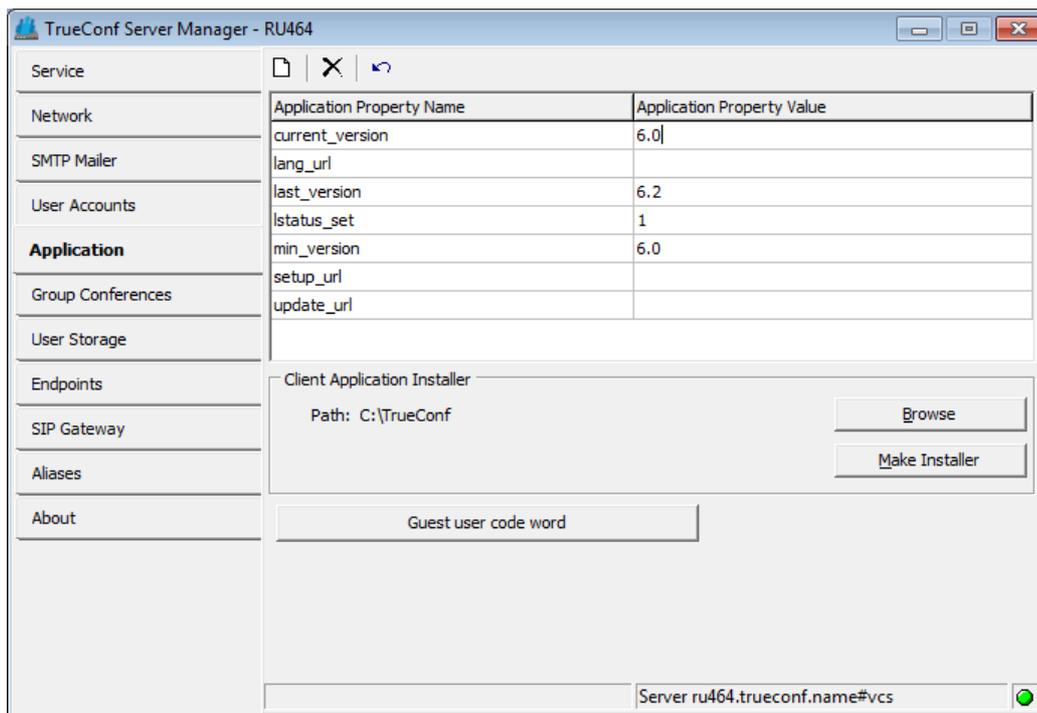
5.4.1 User Properties

Editing in the LDAP mode is unavailable. Profile edit form is available in the Registry mode only.

Element	Description
Status	Can be Active or Passive. Passive users cannot connect with the server but their account will not be deleted.
TrueConf ID	Mandatory field. It is used for authorization and calls. Full TrueConf ID contains this TrueConf Server registered server name.
E-mail	E-mail for user notification
Display Name	Mandatory field. This name will be shown in the address books. If this field is left blank then it will be filled in automatically by joining the First Name and Last Name.
First Name, Last Name	Optional fields. Personal data.
Groups	User may belong to some group.
Password, Confirm	User's password to log in to the client application.

5.5 Application tab

This tab's settings will be transferred to the client application and can control automatic clients' updates.



Element	Description
Application Property Name	Name of the property
Application Property Value	Value of the property
	Add new property
	Delete property
	Restore predefined settings
Make Installer	Make installation file for clients application. More information in “SIP Gateway Tab” section.
Browse	Select folder for installation files
Guest user code word	The code word is used to connect “guest” users from TrueConf web plugin Feature availability can be limited by TrueConf Server license

5.5.1 Application property description

Element	Description
current_version	Displays the version of the client application preferable at this moment. If the client version is lower than the one displayed in «Application Property Value» then user will be asked to update his client. URL for

	update will be given (from update_url).
default_call_destination	Calls routing between SIP and TrueConf using IP addresses. If SIP Terminal calls on TrueConf gateway, and only IP address is set to identify a called user (without user name), the call is forwarded to the particular user (if TrueConf ID is given in properties) or transferred to the conference. Restart the server to enable this property.
min_version	Minimum possible version of the client application. If the current version of the client is prior to the below specified in the field «Application Property Value», work of the client application is suspended also its updating will be initiated.
setup_url update_url	URL where new installer/update for your client applications is located
lang_url	URL where additional language files can be found.
last_version	Client application version, installed during the update process. It is displayed during update.
lstatus_set	Conferencing Status tab (TrueConf Client Application user guide). If you delete this characteristic from the table, Status becomes inaccessible.

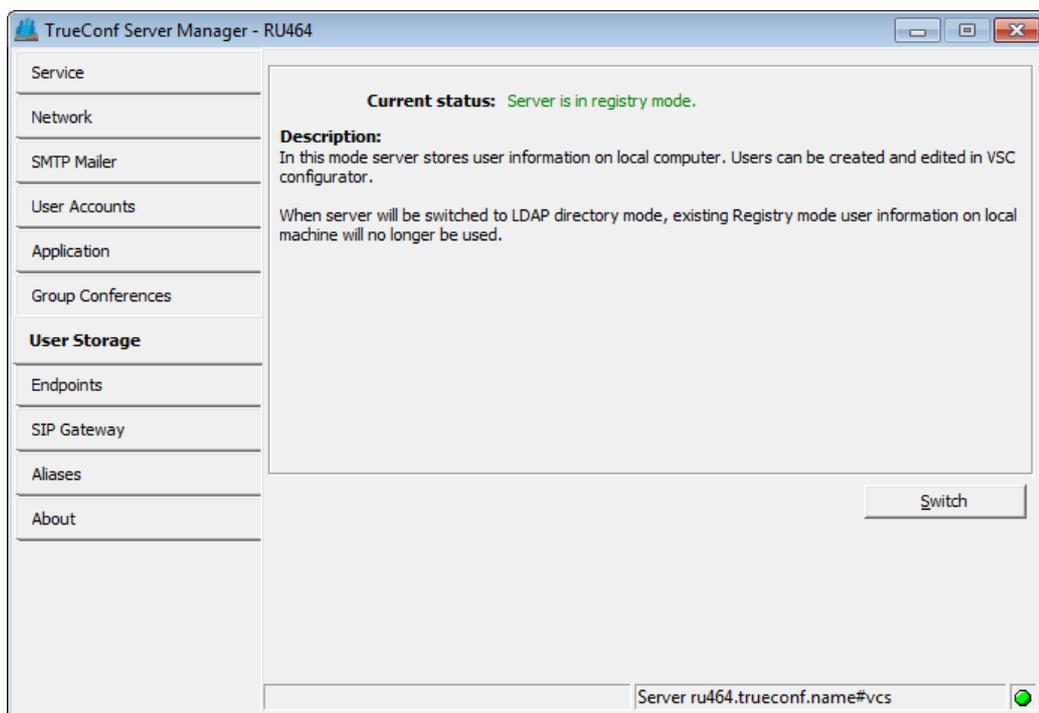
5.6 «Users Storage» tab. Changeover in the user information storage mode

TrueConf Server allows two modes of data storage - Registry and LDAP. Their changeover can be done at any given moment by pressing the «Switch» button in the «User database» tab.

5.6.1 Registry Mode

In this data storage mode the server keeps user information on a local computer. It is possible to add and delete new users from the configuration table. If the storage mode on the server has been changed from the Registry Mode to LDAP then the already existing user records won't be used any more.

5.6.2 User database tab in the Registry Mode

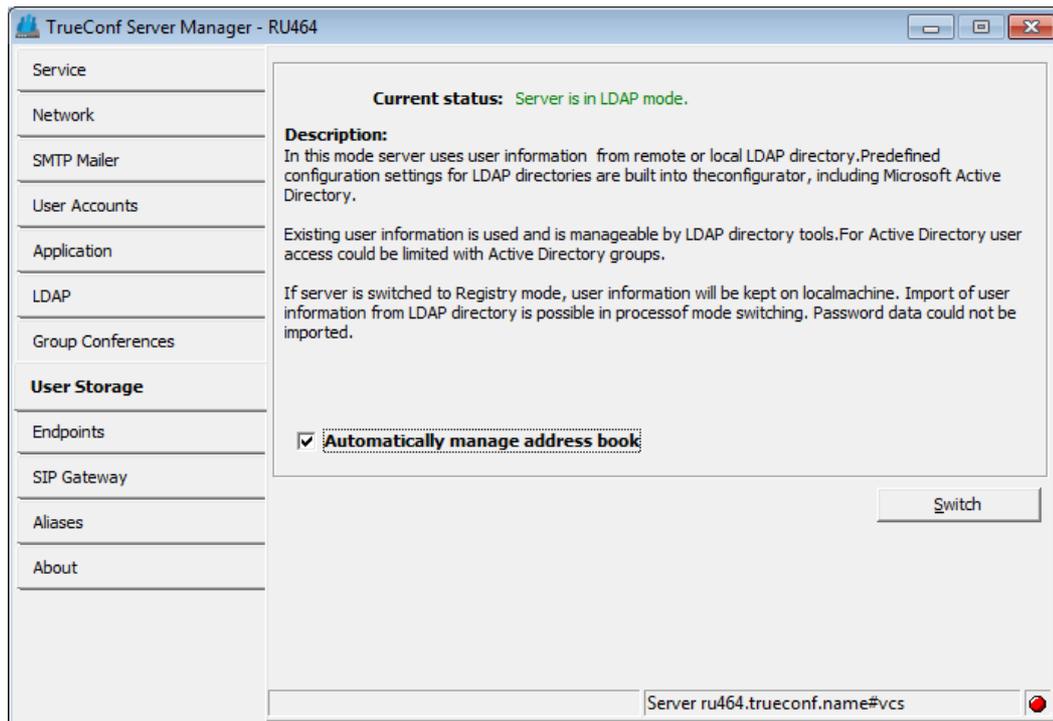


Element	Description
Switch	Switching of the data storage modes

5.6.3 LDAP Mode

In this data storage mode the server takes advantage of the user information from the remote or local LDAP directory. LDAP settings comply with Microsoft Active Directory by default. You can manage the user information with the help of LDAP Directory standard management tools. For Active Directory the user rights can be defined depending on the Active Directory group to which a user belongs.

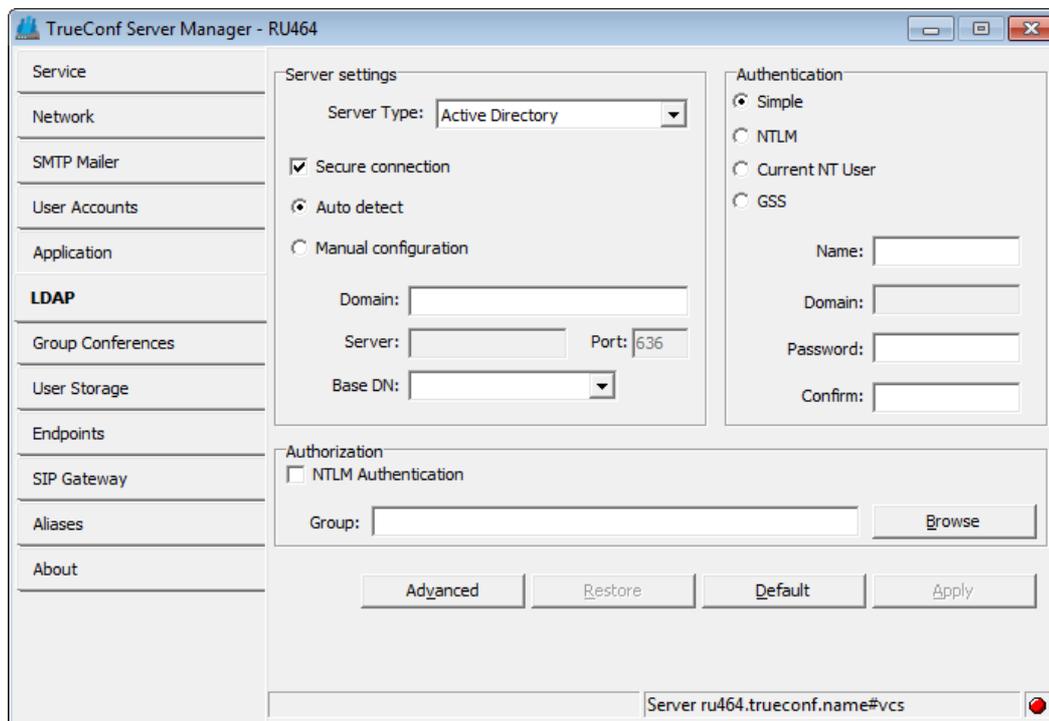
5.6.4 User database tab in the LDAP Mode



Element	Description
Automatically manage address book	Automatic add-on of all the users to every user's address book
Switch	Switching of the data storage modes.

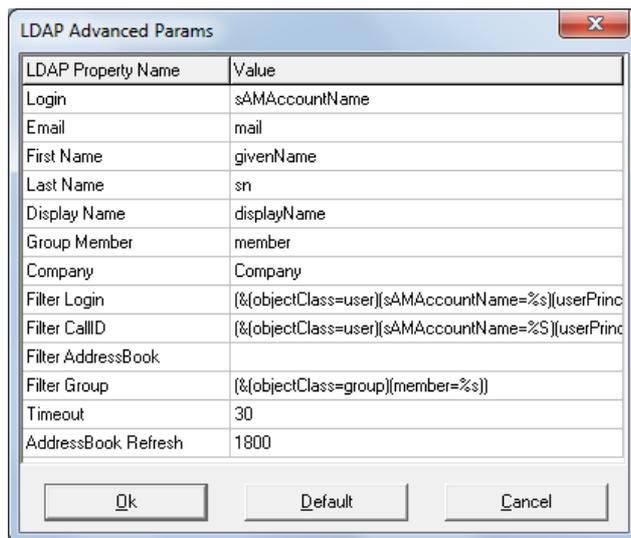
5.7 LDAP tab

LDAP tab becomes available when TrueConf Manager works in the LDAP mode. LDAP mode availability can be limited by TrueConf Server license

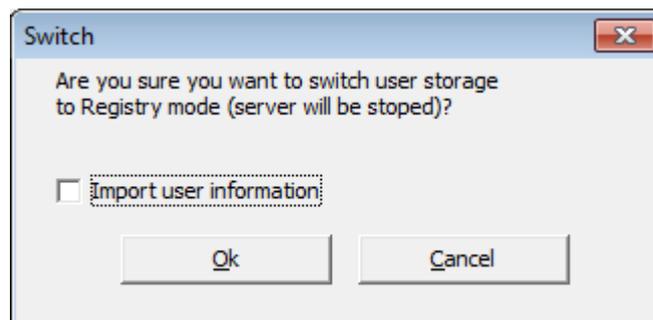


Element	Description
Server type	LDAP Server type.
Secure connection	Connection to the LDAP in the safe mode. Only in this case safe transmission of the user information through the network is ensured.
Auto detect / Manual configuration	Automatic or manual choice of the LDAP server.
Domain (available only in the Auto detect mode)	In the automode the LDAP server can be chosen among the servers by default of the DNS domain, specified in this field. Default servers are being chosen according to the relevant DNS-notes of SRV type. For Active Directory DNS domain name AD can be indicated here.
Server / Port (available only in the Manual configuration mode)	LDAP server address and port
Base DN	Core LDAP context.
Authentication	TrueConf Server authorization modes on the LDAP server.
NTLM Authentication	After choosing this option the users can automatically

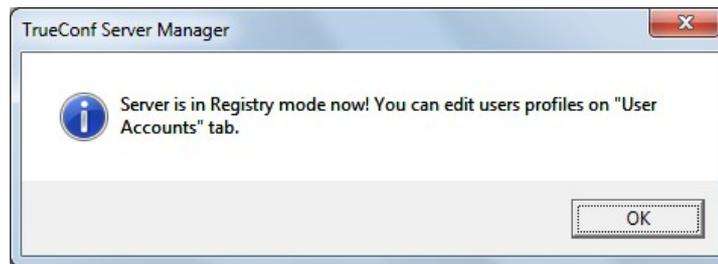
	<p>get authorized in the system by using the current Windows user account.</p> <p>The option is available only for the systems working on the basis of Microsoft Active Directory. For NTLM authentication work it's necessary that the server on which TrueConf Server software is installed is located in the same AD domain with the users.</p>
Name, Domain, Password, Confirm	Authorization parameters on the LDAP server.
Group	<p>For Active Directory in this field it's possible to indicate LDAP - group of users, who can get authorized on the TrueConf Server.</p> <p>To choose a LDAP-group using the Browse button you need to fill in the spaces for connection to the LDAP server (Server Settings and Authentication), including Base DN field.</p>
Additional	Additional LDAP parameters. Allow to adjust the parameters to other types of LDAP-servers.



When changing from LDAP Mode to Registry it is possible to import records about the users. For that in the dialog window, which will appear after pressing the Switch button, you need to tick the **Import User information** option.



When user profile data are successfully imported there will appear a notification:



Note: The users' passwords are not imported. After being imported the users' accounts are marked as «inactive» (see description in the «User accounts» tab).

5.8 Group Conferences tab

This tab allows administrator to create and manage group conferences.

TrueConf Server supports three types of group conferences in two modes – normal and UDP Multicast.

5.8.1 *Symmetric Group conference (Symmetric)*

- Can have up to 16 participants at the same time in the normal mode and up to 16 users in the UDP Multicast mode (number of users is limited by the TrueConf Server license);
- All users can see and hear each other.

This conference type availability is limited by the TrueConf Server license

5.8.2 *Asymmetric conference (Asymmetric)*

- Can have up to 16 participants at the same time;
- One user is chosen to be the Host. He can see and hear everybody;
- Other users can see and hear only the Host.

Conference type availability could be limited by TrueConf Server license

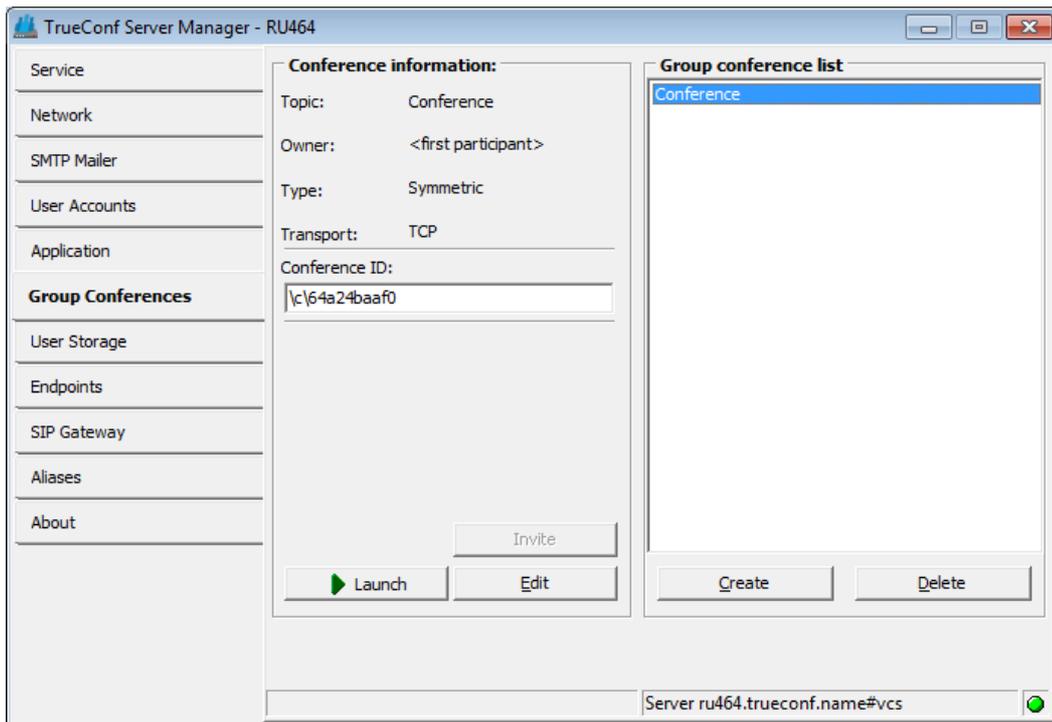
5.8.3 *Role based conference (Role based)*

- Can have up to 120 participants at the same time in the normal mode and up to 250 users in the UDP multicast mode;
- No more than 4 users can transmit video and audio to the others. They are called “broadcasters”
- Other users can hear and see broadcasters. They can give their opinion. They can become “broadcasters” if the Host allows them.

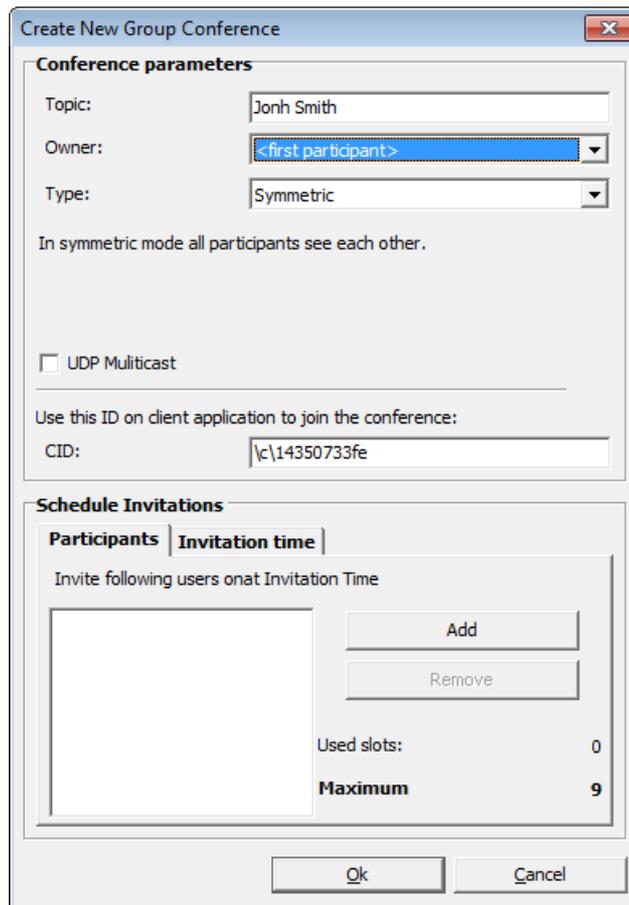
This conference type availability can be limited by the TrueConf Server license

Note: When the conference is getting started the administrator chooses the user who will be the Host.

Other roles will be given by users in a conference. Look for more information in the client application User Manual



Element	Description
Conference information	Information on the chosen conference
Create	Add group video conference
Edit	Edit group video conference
Delete	Delete group video conference
Start	Start group video conference
Invite	Invite the users to one of the already existing conferences.

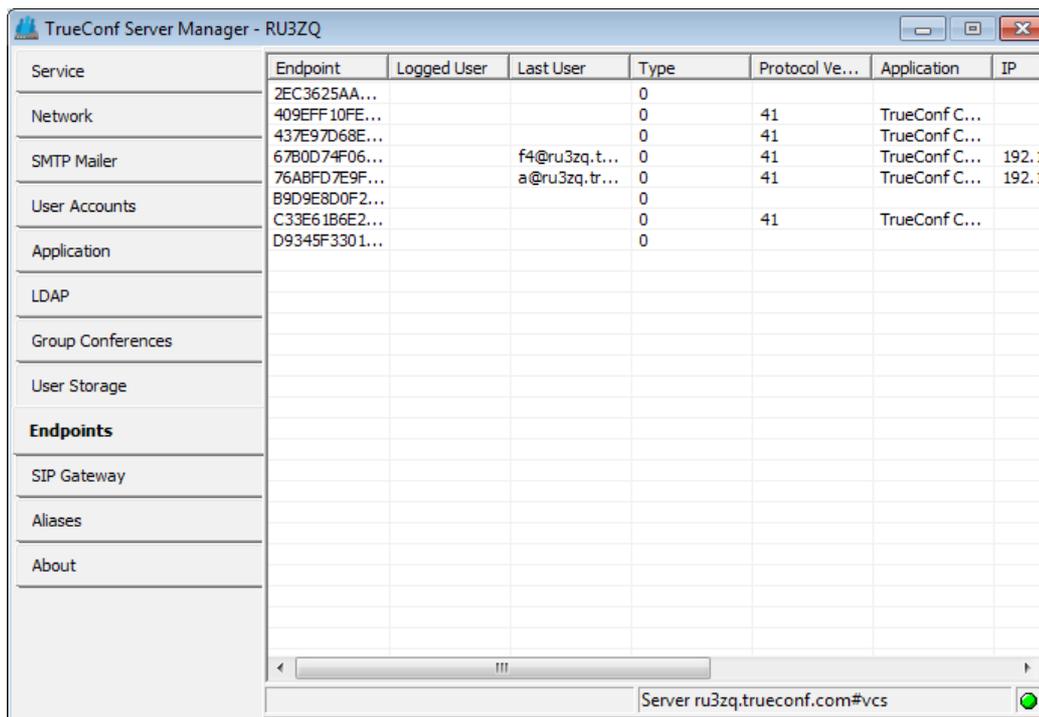


Element	Description
Topic	Topic of the conference
Type	Type of the conference <ul style="list-style-type: none"> • Symmetric; • Asymmetric; • Role based.
Owner	Chose the owner (Host)
UDP Multicast	UDP Multicast allows to use local network resources more efficiently. In this mode video and audio streams are transmitted only in one UDP Multicast domain. Such domains can be set up in local area network (LAN) or VPN. In the internet UDP Multicast is not allowed by default. More availability can be limited by TrueConf Server license
CID	Conference ID that users can use to join the conference
Add/Remove	Here one can add and remove users who

	need to be automatically invited to the conference at the previously agreed time (the «Invitation time» tab)
--	--

5.9 Endpoints tab

This tab allows to view information about the endpoints.



Element	Description
Endpoint	Name of the Endpoint, registered on the server. Endpoint's name is unique and depends on the computer and client software.
Logged User	E-mail of the user currently logged on the server.
Last User	E-mail of the last user logged on the server from this Endpoint.
Type	Reserved for future use
Protocol Version	TrueConf protocol version
Application	Name of the client's software
IP	The user IP-address
Client Version	Version of the software
Registered	Date of registration of this Endpoint (not user!)
Last Connected	Time and date of the last connection between this Endpoint and the server
System Configuration	Elements of the system configuration of the user's system

You can open this tab for full screen. Right-click will open the following menu:

- «Full screen mode». Enabling full screen for this tab.
- «Refresh endpoint list». Refreshing Endpoints information. Same as «F5» or «Ctrl+R».

Double click on the Endpoint name to see detailed information. You can see the following data:

5.9.1 *Sound capture and playback information*

Example of Endpoint's properties:

Audio Capture:

```
Microsoft Sound Mapper
Avance AC'97 Audio
Logitech Microphone (Pro 4000)
```

Audio Render:

```
Microsoft Sound Mapper
Avance AC'97 Audio
```

5.9.2 *Video capture device information*

Example of Endpoint's properties:

Video Capture:

```
Logitech QuickCam Pro 4000
NAS Polycom Video Source Filter
vvd.dll
```

5.9.3 *DirectX information*

Direct X:

```
Version:          9.0
Driver:           ati2dvag.dll RADEON 7200 SERIES
Resolution:      1024x768, 32 bit
Video Memory:    total - 29679616, free - 29679616
Capabilities:    | Bu | Bd | Ou | Od |BFcc|OFcc|YUY2|UYVY| HB |
                  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |
DX INIT OK
```

5.9.4 *DirectX features description*

Properties	Description
Version	Version of the installed DirectX
Driver	Name and description of the video card driver
Resolution	Screen resolution and number of colours
Video Memory	Video memory volume
Capabilities	Current driver capacities
Bu	Upward scaling
Bd	Downward scaling
Ou	Upward scaling using overlay
Od	Downward scaling using overlay
BFcc	Scaling without using RGB video data representation
Ofcc	Scaling using overlay without using RGB video data representation
YUY2	Ability to use video data in the YUY2 format when displaying something on the screen
UYVY	Ability to use video data in the UYVY format when displaying something on the screen
HB	bilinear upward scaling

The assumed terms: 1 – is supported, 0 – not supported.

5.9.5 Connection information

Example of Endpoint's properties:

Network Info:

```
Type:      I don't know
Broker:    srv1:1
Host:      192.168.61.205
Port:      4307
Protocol:  InternetOptions
```

5.9.6 Network Test information

Network Test:

```
Parameter      |      IN      |      OUT      |
-----|-----|-----|
Bitrate, kBit  |    10000    |     9983     |
Total, kB      |     7499    |     7499     |
Jitter Max, ms |      20     |      10      |
Jitter Min, ms |      0      |      0       |
Response, ms   |      50     |      0       |
-----|-----|-----|
Date:          Thu Jan 22 17:08:19 2004
```

Bitrate	Maximum speed during the test.
Total	Total amount of information transmitted during the Network Test
Jitter Max	Maximum deviation of the arrival time of the packet in the network from the mean value
Jitter Min	Minimum deviation of the arrival time of the packet in the network from the mean value
Response	Server response time

5.9.7 Last conference information

Example of Endpoint's properties:

Last Conf:

```
Name          0000001d@srv1:1
Bytes   s/r    73/0      kB
Bitrate s/r    12/0      kbit
Duration 00:00:46
```

Properties	Description
Name	Name of the conference
Bytes	the number of sent / received KBytes
Bitrate	the average throughput when sending / receiving

	data
Duration	Duration of the conference (hh:mm:ss)

5.9.8 System information

Example of Endpoint's properties (It looks like PC is not equipped with a camera):

Hardware Config:

Video Capture: None
 Audio Capture: Avance AC'97 Audio
 Audio Render: Avance AC'97 Audio

sys_conf:

Windows 2000 Advanced Server Service Pack 2 (Build 2195)
 Proc: Type 586 Level 6;
 Client: TrueConf

5.9.9 Events leading to the updating of information about the Endpoint

The following information will be updated when a connection with the server is established or resumed:

- Current Network Info Type;
- Audio Capture, Audio Render, Video Capture, Direct X – updates during client software start;
- Hardware Config – updates during application shutdown.

Updates during a conference:

- Last Conf Name.

Updates after running of the Network Test (menu Setup/ Network in client application):

- Network Test.

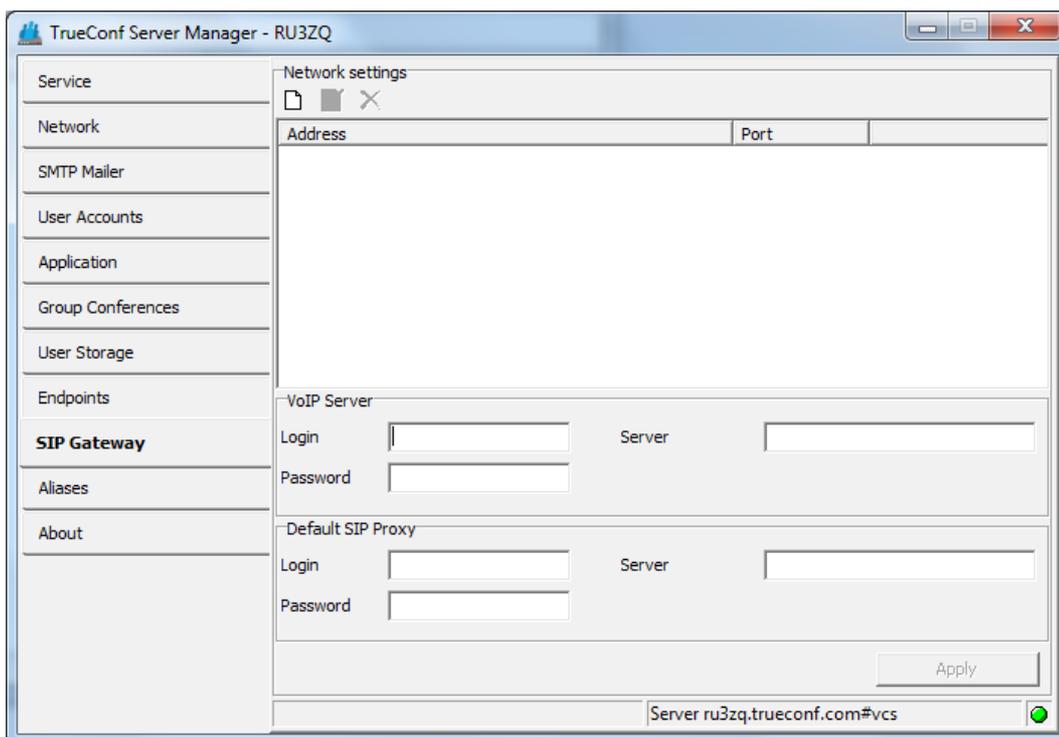
Updates when logging in to the server:

- System information.

5.10 SIP Gateway Tab

Components of this tab allow to configure parameters of the SIP gateway.

NOTE: SIP Gateway tab is displayed only if there is a valid TrueConf Gateway license.



Component	Meaning
Address (Network configuration)	IP-address or host name of the interface, which is used for the gateway.
Port	Port for TrueConf Gateway. The default port is 5060.
Server (VoIP server)	IP-address or host name of the server, which is used for calls in the PSTN.
Login	Account of the VoIP server for the gateway.
Password	Password to the account of the VoIP server, which is used for the gateway in the system.
Server (SIP Proxy by default)	Default IP-address or host name of the SIP server.
Login	Account of the Proxy server.
Password	Password to the Proxy server account.

5.10.1 SIP-terminal calling format from TrueConf Client

One of the formats given below can be used:

- **#sip:Call_ID@Server_name**, where Call_ID is SIP user, Server_name is a host name or IP-address of the SIP server;
- **#sip:Call_ID**, call is directed to the Call_ID user on the server, which is indicated in the VoIP Server/SIP Proxy of the SIP Gateway tab;
- **#sip:IP**, call to the IP-address of the SIP terminal.

Call routing	Value
--------------	-------

Via VoIP	Calls are redirected to phone numbers (#tel:89261112233)
Via SIP Proxy	Calls are redirected to user's Call_ID (#sip: james78)

5.10.2 Invitation of TrueConf customer to the conference that is held on the SIP server.

- login to the client application TrueConf Client ;
- organize conference on the SIP server (MCU), invite terminals to the conference;
- add to the conference TrueConf ID you used to login to the client application TrueConf Client, as **TrueConf_ID@IP**, where IP – gateway address of the TrueConf Server, which is indicated in the SIP Gateway tab.

5.10.3 Invitation of the SIP-terminal to the conference that is held on the TrueConf Server.

5.10.3.1 Connection using CID (Conference ID)

If several group conferences are organized on TrueConf Server, you can choose the conference directly from the SIP-terminal. For that:

- Organize a group conference in the Group Conferences tab of TrueConf Server configuration wizard.
- Remember the CID (e.g. \c\e22a39ba2a)
- In the address bar of the terminal make call on your CID@IP, where IP – address of the TrueConf gateway. *Note:* some terminals (for instance, Polycom PVX) delete special symbols from the address bar. In this case for Polycom PVX you will need to enter \\c\\e22a39ba2a@IP.

5.10.3.2 Connection to the fixed name groupconf

- Organize a group conference in the Group Conferences tab of TrueConf Server configuration wizard.
- Remember the CID (e.g. \c\e22a39ba2a)
- In the Application tab of TrueConf Server configuration wizard create property default_mconf_name, equal to the CID without \c\, for the given example: e22a39ba2a
- Restart TrueConf Server
- Make a call to the name groupconf@IP from the terminal, where IP is address of the TrueConf Gateway.

5.10.3.3 Invitation to the conference from TrueConf Client

- Add to the TrueConf Client address book terminals that you want you want to invite to the TrueConf conference in the format described in the paragraph 5.10.1.
- Organize conference in the TrueConf Server configuration wizard or client application TrueConf Client.
- Invite terminals to the conference by a double click on the terminal name in the TrueConf Client address book.

5.10.4 Problems and Solutions

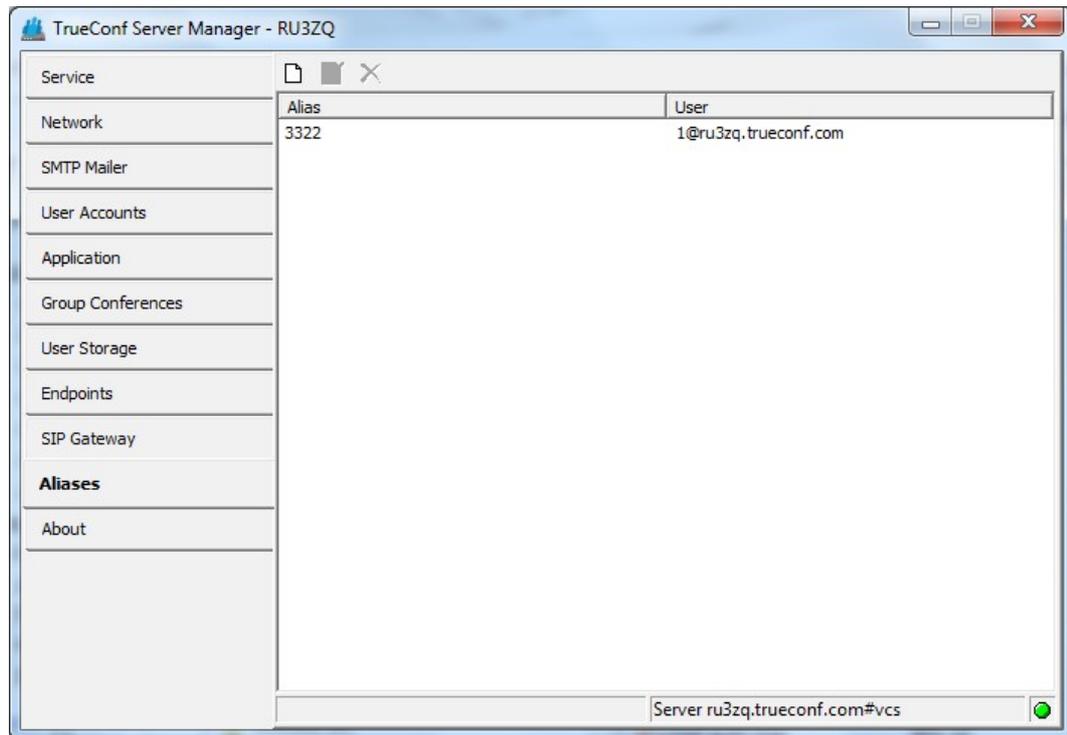
SIP-terminals do not connect with TrueConf Server

Description	Possible reason	Solution of the problem
SIP-terminals cannot connect with TrueConf Server.	Invalid IP-address in the TrueConf Server configurations.	Check rightness and correspondence of the data in the SIP Gateway tab of the configuration wizard: <ul style="list-style-type: none"> • Address: an IP-address of the network interface used for TrueConf gateway. • Server: IP of the host interface, which is used for VoIP/SIP server.
	TrueConf Server is offline or has intermediate status.	Run TrueConf Server by clicking Start button in the Services tab.
	Absent or incorrect parameters of TrueConf Sever on the SIP terminal.	Indicate valid IP-address and TrueConf Server port in the parameter window of the SIP-terminal.
	No network connection.	Check network connection on the PC with SIP-terminal (if SIP-terminal is installed on the PC). To do this you can use “ping” command with IP-address of the PC where TrueConf Server is installed.
There is no video and audio in the conference between TrueConf Server and SIP-terminal.	Incorrect codecs negotiation.	Make sure that SIP-terminal supports one of audio codecs: G.711 (alaw/ ulaw), G.728, G.729a; and video codecs: H.264, H.263.

5.11 Aliases Tab

In this tab PSTN users can dial TrueConf user not by TrueConf ID, but with the help of an alias (extension). You can set an alias to a TrueConf user, that will

be used to dial a person under the corresponding configuration of the ATE from our system.



Component	Meaning
Alias	Alias is entered by a user into the corresponding field. It can contain letters and digits. The Alias can contain up to 80 symbols. Aliases are updated after server restart.
User	You can choose a person from a list of users or enter his/her TrueConf ID into the corresponding field. After the alias is created you can see an alias and TrueConf ID of a user. User name is not unique: one user can have several aliases.

You can edit or delete an alias line with a right mouse click when indicating the necessary TrueConf ID or alias.

6 Client Application Connection

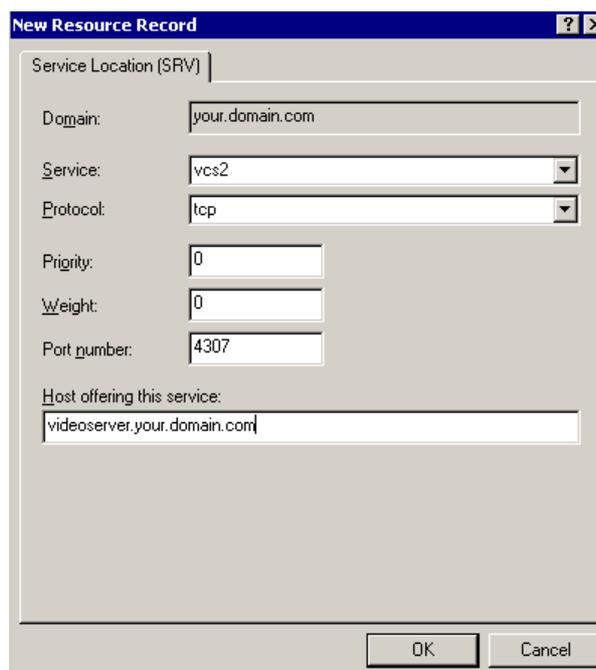
6.1 Connection using auto discovering

The client software of TrueConf includes a function of automatic search for the local server TrueConf Server (auto-discover). It is possible to install the client application without any information about your local TrueConf Server. In this case all information about the server will be detected automatically by using DNS. To do this you need to specify the address of the server in users primary DNS (**primary DNS suffix**).

You need to create SRV record in the domain for **vcs2.tcp** service and specify the TrueConf server address and port.

The following example shows how to do this using DNS utility in Microsoft Windows 2000/2003 Server:

1. Navigate to root of the desired domain
2. Choose «Other New Records...» in a right-click menu.
3. Choose type «Service Location».
4. Set the following parameters.



In this example server has address **videosever.your.domain.com** and port **4307**. Please note that protocol name (**tcp**) does not contain underscores.

6.2 Configuring the client application without using auto discovering

Step 1

Install TrueConf Server. Run TrueConf Manager.

Step 2

Go to the «Application» tab and press «Make Installer». Specify the directory where you want to save the generated installation files. In the specified location the system will create the folder AppClient with the following files needed to install and configure the client application:

- Config.dat;
- TCSetup.exe.

Step 3

Copy the generated files to the client's computer.

Step 4

Run TCSetup.exe on the client's computer and follow the wizard

7 Set up the previously installed client application to work with video conferencing server

7.1 Manual configuration

Go to the application network settings (**Setup | Network ...**).

Turn off the "Connection default" ("Default server connection"), if it is enabled.

Click "Advanced".

Enter the IP address or DNS name and port of the server in the appropriate fields.

8 Roaming between servers

Roaming allows subscribers of different TrueConf Servers to make video calls, conduct group conferences and use collaboration tools. The server which has a "Roaming" option enabled provides media streaming between remote servers that support this feature it too. The number of servers involved in Roaming is unlimited. Group video conferences will be conducted with regard to the limitations specified in the license of the server, initiating the connection.

Video calls and group conferences during Roaming are held on the same principle as within one TrueConf Server. No additional server adjustments should be done when using Roaming feature. Still, the following conditions are to be observed: you need to have license for TrueConf Server with Roaming feature for all servers that participate in Roaming, possibility for all servers and subscribers to connect to your server during Roaming.

The server should be available to other servers by its name, indicated at registration. The server can be registered on the existing DNS name, as well as be specified by the actual server address with the help of the SRV records DNS. To read more please see section "[Connection using auto discovering](#)".

9 Server Diagnostics

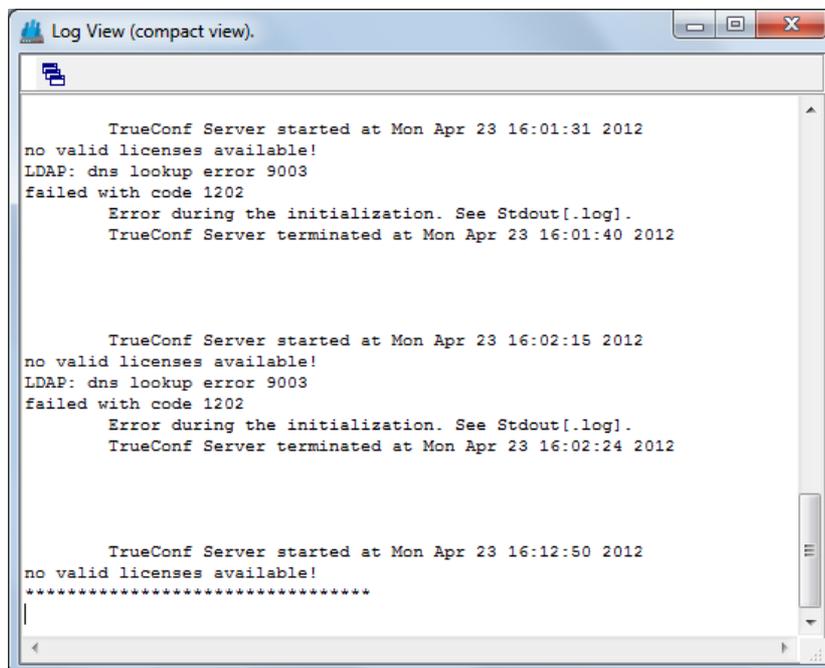
9.1 Server status

Server status is shown in the “Status” field of the “Service Tab” and in color indicator in low-right corner of the configuration application:

- Red – server stopped;
- Yellow – server is starting or shutting down;
- Green – server is online.

9.2 Server’s log files

You can see the server’s log file. To do this, press «View Log» in the «Service» tab. In the opened window you can choose between detailed and minimized view.



```
Log View (compact view).

TrueConf Server started at Mon Apr 23 16:01:31 2012
no valid licenses available!
LDAP: dns lookup error 9003
failed with code 1202
Error during the initialization. See Stdout[.log].
TrueConf Server terminated at Mon Apr 23 16:01:40 2012

TrueConf Server started at Mon Apr 23 16:02:15 2012
no valid licenses available!
LDAP: dns lookup error 9003
failed with code 1202
Error during the initialization. See Stdout[.log].
TrueConf Server terminated at Mon Apr 23 16:02:24 2012

TrueConf Server started at Mon Apr 23 16:12:50 2012
no valid licenses available!
*****
```

10 Troubleshooting

10.1 Server does not start

Trouble: Server does not start; the indicator is red; in Current State field there appears a message “The service is not running”.

1. **Possible reason:** You have no license, or the license is expired

Workaround: contact your reseller or distributor.

2. **Possible reason:** Some server files are missing or have been damaged.

Workaround: reinstall TrueConf Server.

10.2 Information shown in manager program is corrupted or couldn't be saved.

Trouble: Your changes in manager are corrupt or couldn't be saved. After the manager has restarted some information is missing.

Possible reason: No access to registry or registry is corrupt.

Workaround: Grant read-write access to registry. Open manager as a user with administrator rights if needed. Reenter the information.