XCAPI Release 3.6

3 | 2016





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Hello to all XCAPI users!

"The clearer vision of the goal, the greater the success."

- freely adapted from Vera F. Birkenbihl -

With the new release of XCAPI 3.6, we had a very clear objective. XCAPI 3.6 should not only be reliable, but with added functions and features, we have made it more efficient.

We are proud to present the new XCAPI 3.6 with visible performance improvements and enhancements.

New features of XCAPI 3.6 at a glance:

- Improvements in the fax transmission
- Optimized Trace Analyzer
- New functions in the Line Monitor
- Simplified configuration
- Enhanced compatibility
- New features in the SDK
- Support of Windows 10

With our last version of XCAPI, we reached a major milestone. XCAPI 3.6 is a continuation of that development focus. We have enhanced usability, added analysis functions, demonstrate a better overview and continue to grow our compatibility list. Particular attention is paid to the optimization and expansion of the new features.

These features, along with our enhanced troubleshooting tools, provide for quick resolution to almost any problem.

Take this opportunity to extend your XCAPI Software Update Service agreement.

It is time to extend your XCAPI Software Upgrade Service (SUS) and download our new release, XCAPI 3.6.

Oliver Körber

Andreas Geiger





Improvements in the fax transmission

Short Overview

- Better real-time behavior in virtual environments
- Reliable fax transmission when connected to SIP provider
- Optimization of connecting to SIP provider

Fax is still an important function when it comes to legally binding communication. The new XCAPI 3.6 makes a decisive contribution toward stable and secure fax transmissions. This is especially evident when connecting to a SIP provider or using it in virtual environments.

More and more users are choosing XCAPI to connect to their SIP provider. The complexity of these types of connections often lead to packet loss and runtime variations (jitter) because the provider's hardware can no longer be influenced, as opposed to a locally installed PBX system. This can also cause fluctuations in the data transmission. Unlike voice transmissions, fax transmissions are very sensitive to packet loss and runtime variations, causing the process to terminate with a runtime error.

In virtual environments, you can encounter runtime fluctuations and other related unwanted effects. Users are often faced with the challenge to configure virtual environments to achieve normal runtime behavior.

Because of this, we have made significant improvements to increase the tolerance and robustness of packet loss and runtime variations when transmitting data in Softfax mode (G.711 fax pass-through). This makes XCAPI more stable and user-friendly.

Benefits from significantly fewer discontinuations and partial pages will save you time and money.





Optimized Trace Analyzer

Short Overview

- Identifying issues and providing recommended solutions
- Optimized central tool bar
- Data protection feature when exporting
- Graphical view of audio signals

The XCAPI Trace Analyzer offers you the possibility of watching recorded trace files and detecting problems. The Trace Analyzer is part of every XCAPI installation and clearly shows recorded activity without the need for other tools (e.g. Wireshark).

XCAPI Trace A	nalyzer 3.6.2	2						
FILE CALLS	DETAILS	MWI REG	ISTRATION	SIP OPTIONS	SYSTEM	0	WARNINGS	
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Value								Description
T.38 Packet L	DSS							88 packets were lost from the receiver side
Time Source								Please optimize the configuration of the real time behaviour according to the TechNote for virtual systems.
		Value		Description				
		T.38 Pack		88 packets were	ost from th	e receiv	er side	
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BT: 00:01:03.037	S	M: 00:01:03.0	37	PM: 00:00:00.00)	DT: 9/2	4/2015 12:58:44	PM

Warning of packet loss and appropriate solution

The XCAPI Trace Analyzer provides valuable help in troubleshooting issues in your VoIP infrastructure: Any errors are recognized automatically in the "Warnings" tab while providing the right approach for solving your problem. If packet loss occurs in the "Warnings" page, simply double click and you are automatically placed to the appropriate error in the trace.





Optimized Trace Analyzer

One focus of our navigation is the established style of the XCAPI Line Monitor with the top central toolbar. Pictograms with help text enable you to find important information, faster and more efficiently.



New User Interface

The new export function within the Trace Analyzer allows you to select individual calls and store them as new trace files. This is especially helpful when isolating a single call from a large list for further analyzing. This will ensure your customer's privacy and protect their data.

In addition, you can make the displayed phone numbers anonymous. Any number of digits from the called numbers can be replaced by "X", masking the original digits. The Trace Analyzer now supports merging multiple trace files into a single trace file for archival purposes or for support inquiries.

RLE CALLS DETAILS MWR REGISTRATION SIP OPTIONS SYSTEM WARNINGS Open Multiple Close Export Export Stat Trace Trace Value Value Stat Duration End Advanced Options Provide options Outdo Outdo<	XCAPI Trace Analyzer 3.6.2 (C	∑\xcapi.xct)			
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Accepted [None] Voice, Fax & Communication Messages CAPI Messages P SIP BT: 00500,0000 PM: 00500,000 DTAFF Listening Ves	Voice, Fax & Communication N 	Messages CAPI Messages		Disconnect nitiator API confirmation API indication DTMF	Application [None] 0x3410 - Normal call clearing

Export dialogue with data protection



Optimized Trace Analyzer

The Trace Analyzer provides advanced information to fax calls. This enables you to determine whether the T.38 protocol or Softfax (G.711 fax pass-through) has been used. This will also display the IP address of the media gateway.

If packet loss occur during a call, it will be displayed in color and shown in the columns RTP packet loss and T.38 packet loss.



Display of Packet Loss in T.38 Fax

New features in the graphical view of the audio signals make it very convenient to assign background noises to several events and to recognize connections. For this purpose the call is divided into 2 separate groups, "received" and "transmitted" audio signals where occurring events will be highlighted.

A zoom function makes the precise analysis easier. Double clicking on the event points to the precise entry in the SIP communication for further review.



Representation of the audio signals with the corresponding events





New functions in the Line Monitor

Short Overview

- Optimized overview of all calls in detail
- Graphical analysis of call statistics
- Extended export and delete functions including Excel templates

The XCAPI Line Monitor provides a quick overview of the installation and configu-

ration as well as a registration of all calls. This enables you to identify and make potential system optimization and improvements quickly and easily.

The new graphical analysis is well suited for preparing call statistics for presentations. Individual adjustment of the color display and the temporal representation make the Line Monitor an even more powerful and convenient tool.



the use of softfax or T.38

Delete function with determining the deletion date

We have also equipped the Line Monitor with new features for simplify archiving of data. Thus, various excel templates are available. The user can decide which data can be deleted. You can delete all data, or filter the data by date/time so you only work with the data you need. This can be done for security reasons or to have the data for a certain period by itself in the log file.

One practical case includes an example to delete data from various tests after installation. If you want to delete certain data from the log file but still need it available, there is a backup feature that stores deleted data in a separate file.





Simplified Configuration

Short Overview

- Clear display of all relevant licensing data including LOD key
- Simplified renewal function of expired licenses

In our new configuration you have all license information at one glance: Whether LOD key, Hardware ID or expiration of Software Upgrade Services (SUS). You will find all the important information clearly listed. All of expired temporary trial licenses are also displayed.

In addition you have all required data for updating the Software Upgrade Service (SUS) or moving your license available to you.

You save a lot of time while performing a Service Upgrade or moving your license because a simple click on the button "Update License" and in a few steps everything is completed.



LOD key display





Enhanced compatibility to PBX systems and SIP provider

In addition to a streamlined user interface, we have further expanded our compatibility list with existing PBXs and SIP providers.

In total, we can offer you 16 new PBXs and 12 new SIP providers after extensive testing in our laboratory at TE-SYSTEMS.

The controller wizard assists you in setting

up the corresponding vendor-specific settings and will take care of the major configurations in a few steps. The following screenshots of the Interoperability List show an extract of the recently added PBXs and SIP providers.

The complete list of compatible PBXs and SIP providers is available in our online **Community**.

		H.323 Protocol SIP Protocol							I		rity	6														
					Fax Supplementary Services					Fax Supplement				ary Ser	vices	Security										
Company Product		Relea	ase	Softfax 14.400 bps	T.38 14.400 bps	Message Waiting Indication	Call Diversion / Call Deflection	Call Transfer	Redirecting Number	Softfax 14.400 bps	T.38 14.400 bps	T38 V.34	Message Waiting Indication	Call Diversion / Call Deflection	Call Transfer	Redirecting Number	TLS / SRTP									
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Interoperability List

Interoperability List | SIP provider





New features in the SDK

Since XCAPI 3.5 we have added a number of new features in the SDK.

New configuration interface

Applications can configure XCAPI without XConfig. Controllers can be created and changed. In the sample program "Configuration" you can see examples of this.

Access to licenses

License management can be accessed directly through the SDK. So, it is possible to access the license from the application and integrate the license immediately in your own application.

Fax quality information

In addition to the RTP statistic information there is now T.38 quality information. During T.38 fax transmission, the quality and the cumulated statistics will be transferred in regular intervals. The data after a fax transmission can then be stored in a database. The quality of each call can be shown. This is complemented with a new sample program "FaxQualityInformation" which indicates the implementation of this function.

Improvements when generating DTMF tones

In some cases there were only produced short DTMF tones. Here is an adjustment can be made to the XCAPI standard values.

Additional diagnostic information

You are now able to request the SDK version, the path of DLLs and the application information.

Further details on the changes and new features can be found in our SDK documentation in our **Community**.





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