

Kofax Communication Server

TC/LINK-SDD Technical Manual

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The logo for Kofax, consisting of the word "KOFAX" in a bold, blue, sans-serif font.

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Chapter 1

About Secure Document Delivery

Kofax Communication Server (KCS) is the solution of choice for business critical communication. Most of today's business to business (B2B) communication is performed via fax. According to IDC the worldwide fax traffic will continue to grow in the next 5 years. But meanwhile many businesses are discovering a cheaper way of handling everyday communication: the Internet.

KCS supports Internet messaging since 1997 when with 'Vienna' it embedded open protocols into its state-of-the-art server solution. Vienna allows companies to leverage the KCS solution within an Intranet, using a common set of protocols like SMTP, POP3, IMAP and LDAP.

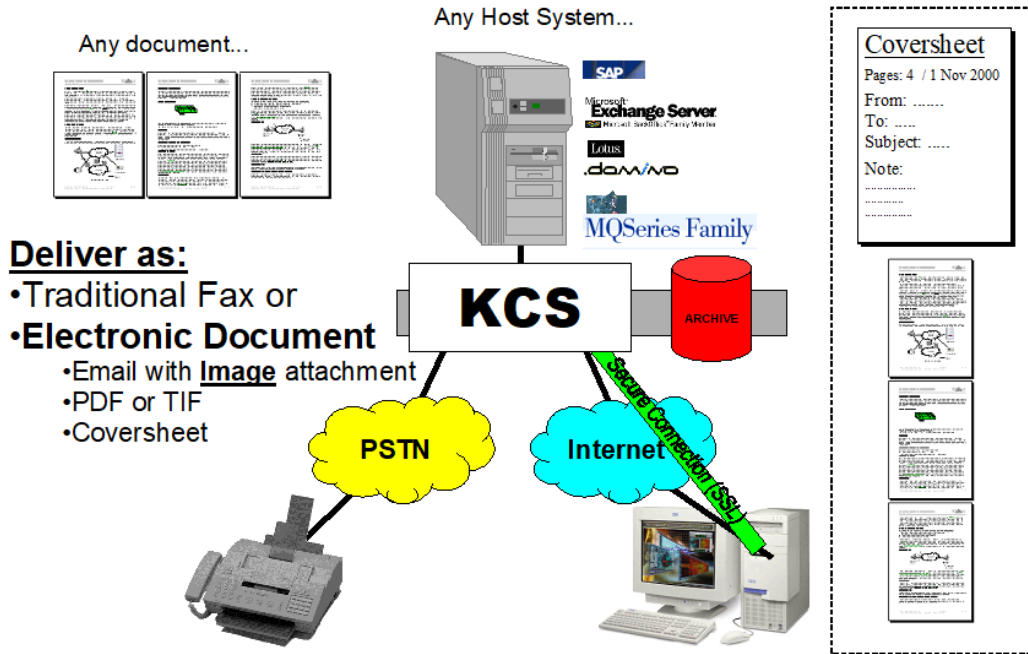
Meanwhile the Internet and particular email communication has become part of everyday business and enterprises are looking for ways to leverage this low cost network for reliable business communication.

With **Secure Document Delivery (SDD)**, Kofax provides an evolutionary path for companies to manage the transition from fax communication to XML based B2B communication.

Positioning, Advantage and Strength

- Messages from any application can now be seamlessly delivered either via fax or email.
- All the advantages of fax messaging (coversheet, unmodifiable message content and reliable delivery) combined with the low cost of email delivery.
- Leverages industry standard Adobe Acrobat® PDF or TIFF to transmit business critical information.
- The same coversheet used for Fax transmissions can optionally be added to the PDF document.
- Unlike normal email, a PDF with embedded coversheet can be further processed outside the email environment without loss of critical information like sending date, originator/recipient information, number of pages etc.
- Existing KCS customers can immediately start saving communication costs by leveraging the new SDD capability from any of their existing fax enabled business applications.
- Using the advanced routing capabilities of the Kofax Communication Server, message delivery via fax or email is handled highly transparent to the user or business application.
- KCS's alternative number routing options guarantee message delivery with automatic fail-over to alternative communication methods.
- Message delivery can be limited to business partners providing a secure email gateway (SSL connection). If a secure connection is not possible, the message can be automatically delivered via Fax instead.
- Use the separate Setup item TC/LINK-SDD for installation of a TC/LINK-SM instance dedicated to Secure Document Delivery.

Structure of the Product



Chapter 2

Functionality

Rerouting of outgoing messages

This product is targeted for customers who want to make a smooth transition from fax communication to email communication. During this transition phase, and even afterwards, some business partners can be reached via fax only, others can be reached via fax or email.

Secure Document Delivery allows the customer to centralize the decision which communication medium shall be used for which business partner. The end user need not know about this, he can still use fax numbers for addressing. The correlation between fax numbers and corresponding email addresses is configured on the KCS. If an alternative email address is configured for a specific fax address, TCOSS reroutes the message to the email address via TC/LINK-SDD. Messages to fax numbers without alternative email addresses are sent via fax as usual.

Optionally, you can configure TCOSS to use the fax address as a fallback: If the message cannot be delivered via email, it is sent via fax.

Email with Fax Look & Feel

If the message is rerouted to an email address, the recipient gets a message with a PDF, TIF or TCI attachment. This attachment holds the complete message, including coversheet, text and graphics, as a single business transaction. The attachment can be viewed via a graphics editor of the user's choice and it has the look and feel of a fax message, - only the fax header line is missing.

Security

Optionally, TC/LINK-SDD can use the SSL feature and deliver the message only if a secure connection can be established. If this is not the case, the alternative fax address is activated and the message is rerouted for delivery via fax.

Message Rerouting Details

Rerouting of fax messages via the Internet can be achieved via different ways. The most important possibilities are listed in this chapter.

Automatic Rerouting: Via rr99 and KCS User Profiles

This option is recommended if the customer uses TC/LINK-SC, TC/LINK-AC or TC/LINK-MX for sending.

These link types allow end users to specify a fax recipient without explicitly specifying the name of the Kofax fax service; - TC/LINK uses the default fax service which is configured in the TC/LINK registry. This is important, because a new service must be used for message rerouting. TC/LINK's registry value *Topcall*

VFaxService must be changed to the name of the new service. Thus, every fax message sent by an end user uses this service and is a candidate for message rerouting.

Message rerouting is done via the INBOUND section in rr99. For every business contact to be addressed via email there must be a corresponding KCS user. The user has an inactive address with the new fax service, a first active address with service SMTP and a second active address with service FAX (optionally, only if fax shall be used as fallback).

Normally, such users are created automatically via Kofax Dirsync.

If there are many business partners with email addresses, the configured maximum number of TCOSS users may be a limitation (currently approximately 50.000).

Configuration on TCOSS:

New service

Create a new service for sending fax via TC/LINK. This service is only used for rerouting and can be compared with the SMTPIN and SMSIN services. Its format is Free Format. The prefix will be used in rr99 and should be a special name that is not used for any real KCS user.

The service shall not have binary capabilities.

Example:

```
Service name:    FAXOUT
Description:    Reroutes outgoing faxes
Address type:   Free address
Prefix:        FAXO:
Capabilities:   RTI
```

Changes in rr99

You must add 2 lines to the INBOUND section of the file rr99, to cause TCOSS to look up FAXOUT addresses in the KCS user profiles.

```
FAXO:~, ,
FAXO:~, F:~,
```

The first line means that the routing via proxy addresses will be used for all addresses with prefix "FAXO:". The KCS recipient store is scanned for inactive addresses of KCS users having service FAXOUT and the number that was used for sending. If there is a match, the address is replaced by all active addresses of the user.

If there is no match, processing continues in the second line. In the second line, the prefix "FAXO:" is replaced by "F:". Thus the message will be routed to the fax channel group if no KCS user is found.

User profiles

Create a KCS user for every business partner that shall be addressed via email instead of fax. The KCS user does not need any rights, it is only used for routing. In an inactive address, specify the service created above (FAXOUT in our example) and the partner's fax number.

Additionally, the user must have an active address with his email addresses (usually with service SMTP). Do not give him a TOPCALL address!

If the fax address shall be used as fallback, add an active address with the user's fax number and the normal fax service at the end of the address list.

Attention:

The FAXOUT address stored in the user profile must be exactly the same as the fax address that end users enter when sending a fax (with / without area code, blanks etc.). TCOSS does not apply any normalization for the FAXOUT address.

If the addresses of the business partners are already stored in an external directory (e.g. on the mail server, or in the Active Directory), you might be able to import them via Dirsync. In this case, the dirsinc template must be a TCOSS user profile, with an inactive FAXOUT address, an active SMTP address and (optionally) an active fax address at the end of the address list.

Limitations:

Only addresses with the new service (FAXOUT) are subject to routing !

With several link types, users explicitly specify the KCS service used for sending.

In the past, users specified the real fax service, - now they must specify the new FAXOUT service if the message shall be routed via email.

If such addresses (with hard coded fax service) are stored in an address book on the mail server or on the user's computer, the service name must be changed before they can be used for routing.

Automatic Rerouting: Via KCS Address Book

This option is recommended if the business partners are already stored in the KCS address book, and are referenced via their short name when somebody sends them a mail.

The following link types allow you to specify a KCS address book entry as a recipient:

TC/LINK-X4, TC/LINK-MX, TC/LINK-FI, TC/LINK-SJ.

In this scenario, you simply add the email address as an active SMTP address to the existing address book entry, and make sure that it is the first element in the address list.

You can leave the fax address there if it shall be used as a fallback.

No changes in rr99 and no new services are needed.

Users continue using the short name of the address book entry when sending a message.

Limitations:

Cannot be used with TC/LINK-SC, TC/LINK-AC, TC/LINK-LN, TC/LINK-SM, TC/LINK-WM, TC/LINK-GW.

Explicit Rerouting: Alternate Addresses Specified by Originator

In addition to the centralized solutions described above, the end user can always specify alternate recipient addresses by using the FREE service and separating the alternative addresses with a '\ ' character.

Example (TC/LINK-FI):

TO: SN=Contact1, SE=FREE, N=TCLSMQI:contact1@company.com\F:4315555555

In this example, the recipient has two active addresses, and TCOSS will first try to send the message to the internet address ("contact1@company.com"). If this is not successful, TCOSS will try the second active address and send the message via fax.

Emails with Fax Look & Feel

In a standard scenario, the message created by the end user is posted to TCOSS via a link. This link instance, let's call it the "sending link" checks the service capabilities of all active recipient addresses. If any active recipient address does not support binary format, the sending link converts file attachments to KCS image blocks. The conversion result is added to the file attachment as an alternative content.

(There are ways to force conversion of all attachments, disregarding service capabilities, configurable via registry keys *General\AltForceBinToTCI*, *General\AltForceImgToTCI* and *General\AltExtSuppressBinary*. But these keys apply to ALL messages sent via the link. As document conversion slows down TC/LINK performance, you should only use them for link instances doing Secure Document Delivery only.)

After converting the message, the sending link posts it to KCS. TCOSS does message routing and creates a send order for every active recipient. If the message is routed to the Internet, an instance of TC/LINK-SDD picks up the message from TCOSS.

For Secure Document Delivery, TC/LINK-SDD must create a single graphic attachment, containing all text and image components of the message. This means, if the message contains file attachments, TC/LINK-SDD must use the attachment's image alternative instead of its binary content.

In a standard installation, TC/LINK creates a file attachment from the original binary content, so that the recipient can open the attachment with the application that created it.

This means that TC/LINK-SDD must be explicitly configured to use the image alternative of attachments. Please note that this will apply to all messages received by this link instance: when converting an attachment with image or text alternative, the binary content will be ignored.

Configuration for the Sending Link

In order to send an image of the complete message, it is important that all message attachments are converted to KCS image format.

Forcing Document Conversion via Service Capabilities (Standard)

For routing via KCS address book entries, make sure that the address book entry has at least 1 active address that does not support binary format. For example, use an alternative FAX address as a fallback.

If you use routing via rr99 and KCS user profiles, the message is officially sent to service FAXOUT (or a comparable service). Make sure that this service has no binary capabilities.

If the end user explicitly specifies alternative addresses via a service of address type FREE, make sure that this service has no binary capabilities.

Forcing Document Conversion via Registry Configuration (Only for Dedicated Link)

If the sending link is dedicated to Secure Document Delivery, registry key *General\AltExtSuppressBinary* offers an easy way to force document conversion and remove the binary content of an attachment.

This registry key holds extensions for file types that shall be transmitted only as KCS image blocks (and not as binary attachments). Enter all file types that will be sent to this list.

Advantage: no extra configuration on TC/LINK-SDD

Disadvantage: this applies to all messages; all used file types must be known

Sending Copy for Notifications

TC/LINK-SDD can be configured to create a sending copy, consisting of the image of the complete message (as it was transmitted to the next SMTP node). This is only done if the originator requested a sending copy for this send order.

In order to include sending copies in notifications, you must configure the sending link to include “cover + sendcopy/full msg” in the notifications. This can be done during KCS setup. As an alternative, you can also configure the following registry values via a registry editor:

Topcall\Non\DeINfOrigToMail = 1

Topcall\Non\DeINfOnlyText = 0

Topcall\Non\DeINftxtToMail = 1

Depending on the graphic format, the sending copy consists of 1 or more graphic attachments.

Configuration for TC/LINK-SDD

In order to send an image of the complete message, it is important that TC/LINK-SDD uses the image alternative of all message attachments. Additionally, the link must be configured to concatenate all text and image components into a single graphic attachment, and to include the coversheet information in this attachment.

Force Usage of Image Alternatives

In a standard scenario, set registry key *General\FmtFileAttachment* to “ITB” and registry key *General\FmtRtfBody* to “IT”.

If all sending links use the *General\AltExtSuppressBinary* option, changing the *FmtFileAttachment* key is not necessary.

Force Usage of PK7 Signed Alternatives

If TC/LINK-SDD shall send messages with email signatures (PK7) created by TDCSIGN, you must make sure that TC/LINK-SDD really uses the PK7 representations of attachments.

Configure registry value *General\FmtFileAttachment* to use the binary representation as the preferred one (value starts with character B).

Example: “B(PK7)IT”

Also, change registry value *General\ConvertToPDF* from “AlwaysComplete:STB” to “AlwaysComplete:ST”. Otherwise, TC/LINK-SDD removes the PK7 attachments.

Cover Sheet

“Fax Look & Feel” for emails means also that the message contains the complete coversheet information (originator, recipient, date, number of pages ...). By default, TC/LINK does not include the coversheet in the message.

In order to include the coversheet, use the following registry keys in TC/LINK-SDD:

General\CompatibilityNoCover = 0

Topcall\IncludeCover = 1

In the scenario described in section “[Automatic Rerouting: Via rr99 and KCS User Profiles](#)”, you cannot use SMTP and FAX addresses in the coversheet, because the message is officially sent via service FAXOUT. Use \$Add0FAXOUT\$ as a placeholder for the fax address.

Graphic Formats

Secure Document Delivery is only supported for target formats TIF, PDF and TCI. With other image formats, it is not possible to include the complete message in 1 attachment.

Of course, TC/LINK-SDD must be set up to poll the queue corresponding to this graphic format, and the SMTP address of the business partner must use this queue.

Registry keys *ConvertToTIF*, *ConvertToPDF* and *ConvertToTCI* (below the *General* subkey) control conversion from KCS Image format to TIF, PDF and TCI.

Possible values for these keys.

SinglePage	1 attachment per TCI page
MultiPage	1 attachment for every contiguous sequence of TCI pages
CompleteIfGraphic	If message contains at least 1 graphic block:1 attachment containing text and graphics from the complete message
AlwaysComplete	Without regard to message contents (also for text-only messages):1 attachment containing text and graphics from the complete message
AlwaysComplete:XXXX	AlwaysComplete with modifiers, see below (replace XXXX with modifier characters !)

Option *AlwaysComplete* offers additional “modifiers” for fine-tuning of SDD features.

You specify these modifiers by setting the registry key to “*AlwaysComplete*.” followed by a list of modifier-characters.

Recommended modifiers for *AlwaysComplete*.

Modifier character	Description:
T	original text is not copied to message body
B	original binary attachments are not part of the message
S	for messages only: create a sending copy

Use *AlwaysComplete* (with optional modifiers) in order to create a single graphic file containing the complete message, even if the message contains only text.

The modifiers will be discussed in detail in the following paragraphs. As a rule, you can use “*AlwaysComplete:TBS*” for TC/LINK-SDD.

Optionally Disable Additional Message Content

If you use the conversion option “*AlwaysComplete*” without modifiers, the resulting email contains a graphic attachment holding the complete message, - but it may contain additional components:

- the original message text (and text from optional coversheet)
- original binary attachments (if there is no image alternative)

This means that at least the message text is duplicated: It is part of the graphic attachment, and it appears in the message body of the email.

You can suppress these additional message components by using conversion option “*AlwaysComplete*” with modifiers *T* and *B*.

“*AlwaysComplete:TB*” means:

- The original text is not copied to the message body (modifier *T*).
- Binary attachments without a image alternative are not part of the message (modifier *B*).

Optional Descriptive Text

TC/LINK-SDD can be configured to insert a descriptive text in front of the image attachment, e.g. a hint how to open the attached graphics file.

Depending on the graphic format, TC/LINK-SDD takes this description from a text file in the application directory of TC/LINK (C:\TCOSS\TCLP). The syntax for the text file names is “DESCR_X.TXT”, where X is a placeholder for the graphic format character (last character of the TCOSS queue name).

Additionally, the feature works for PK7 attachments (digitally signed attachments). For this purpose, there must be a text file DESCR_7.TXT.

If the file does not exist, is empty or contains only whitespace characters, nothing is inserted into the message.

The file must be written using the ANSI code page configured for the link computer.

Example for DESCR_F.TXT:

“This PDF attachment can be opened with Acrobat PDF Reader Version 4.0. Acrobat PDF reader is a free, distributable software. You can download it from the ADOBE web site: <http://www.adobe.com/products/acrobat/readermain.html>”.

Optional Sending Copy

TC/LINK-SDD can be configured to create a sending copy, consisting of the image of the complete message, as it was transmitted to the next SMTP node. PK7 attachments are also included in the sending copy. This feature must be enabled explicitly, via modifier *S* of conversion option *“AlwaysComplete”*.

Please note that the sending copy is only created if the originator requested a sending copy.

How to Configure TC/LINK-SDD to Request Notifications

In order to request delivery notifications from the Internet, TC/LINK-SDD must be configured to keep send orders *“at next node”* (*Topcall\NotifMail* = 1) and to request notifications in RFC 1891-1894 format (*TCLSM\MimeNotifFormat* = 3).

This configuration is needed if the latest delivery timeout feature shall be used or if the message shall be forwarded to an alternative fax address when delivery via email fails.

As you cannot be sure that all SMTP servers support RFC 1891-1894 notifications, it is recommended to specify a latest delivery timeout (see below).

How to Set a Latest Delivery Timeout

With TCFW and with some mail systems (e.g. MS Exchange, Lotus Notes), the end user can define a latest delivery time when composing a message.

With TC/LINK types where this is not possible, you can define the latest delivery time in the originator's default template stored in his KCS user profile. In this case, you should define a relative value, e.g. 8 hours. If the originator has no KCS shadow user, TC/LINK takes the default send options from the guest user (configured in registry key *Topcall\Guest*).

TC/LINK will take the default delivery timeout from the template and will post the message to KCS with the correct settings. If the latest delivery timeout expires before a notification is returned, TCOSS terminates the send order, and the sender of the original message receives a non-delivery notification.

Email Header in Body Text

Email header information like date, from, to, and subject can be added to the email body at the very beginning. This feature is available for TC/LINK-SM, TC/LINK-SDD, and TC/LINK-MX7.

For more information about installation, configuration, restrictions, and use refer to TC/LINK-SM / TC/LINK-OC Technical Manual.

Chapter 3

Prerequisites

- Standard KCS 9.2 TCLINK prerequisites
- SSL certificate from TC/LINK-SDD or from any CA.
- TC/LINK-SM license

Note You must install the link via the TC/LINK-SDD item in KCS setup. Reconfiguring a standard TC/LINK-SM instance manually for Secure Document Delivery is NOT recommended.

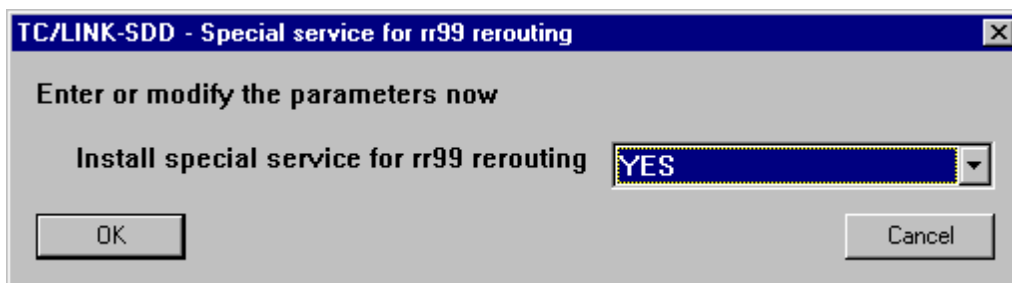
Chapter 4

Installation

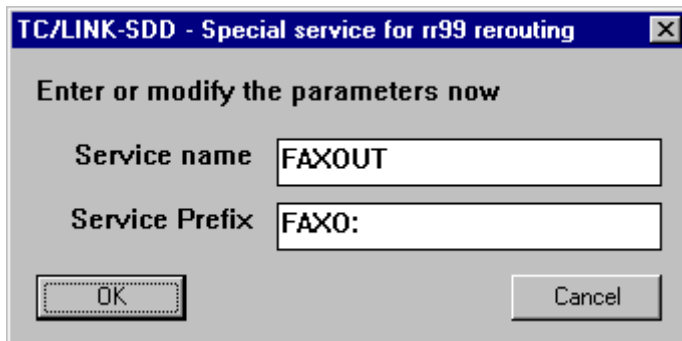
A new item in KCS Setup, "TC/LINK-SDD", can be used to install an instance of TC/LINK-SM that is configured for Secure Document Delivery. The Setup screens are almost identical to the standard TC/LINK-SM Setup, but:

- The registry subkey is TCLINKSDD.
- The default values for SDD specific registry keys are those recommended in the table below.
- TC/LINK-SDD setup offers an option to install the special service needed for rr99 routing.

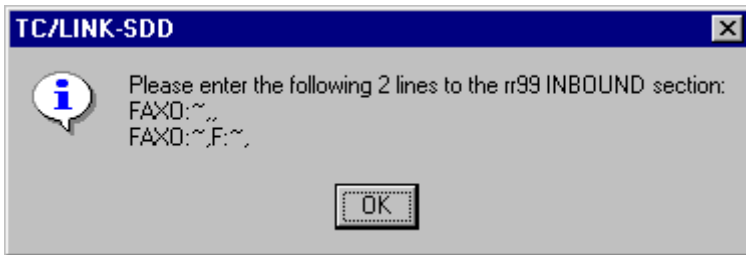
Additional Setup screens:



Choose if special service for TC/LINK-SDD routing via rr99 shall be installed.



Enter name and prefix of this service.



Setup shows you how to modify the rr99 file.

Nevertheless, you can use Setup and registry editor to make a TC/LINK-SM instance work like TC/LINK-SDD and reverse.

Additional configuration for sending link(s):

Make sure that attachments are converted to TCI, e.g. by sending to a service without binary capabilities. If rr99 routing is used, you must change the default fax service.

For details, see section [Configuration for the Sending Link](#).

Additional configuration for TC/LINK-SDD:

If SSL needed:

Copy private key and certificate to directory C:\TOPCALL\SHARED.

Copy remote root certificates into the file "rootcerts.pem" in the directory C:\TOPCALL\SHARED

See *TC/LINK-SM Technical Manual* for details (section SSL Security Details).

Additional configuration on TCOSS server:

Depending on routing method, see sections [Automatic Rerouting: Via rr99 and KCS User Profiles](#) or [Automatic Rerouting: Via KCS Address Book](#).

Although the special service for rr99 routing can be created automatically (TC/LINK-SDD Setup), the File rr99 must be changed manually.

Summary of registry keys:

Name	Type	Recommended	Relevant for	Description
Topcall\FaxService	SZ	FAXOUT	sending link	default fax service, use if routing via rr99
General\AltForceBinToTCI	DWORD	0	sending link	1: force image alternatives created via TCDC
General\AltForceImageToTCI	DWORD	0	sending link	1: force image alternatives for graphic files (via TCIMGIO)
General\AltExtSuppressBinary	MULTI_SZ	sending link		discard binary content for certain file types

Name	Type	Recommended	Relevant for	Description
General\ FmtFileAttachment	SZ	ITB	TC/LINK-SDD	take image alternative of attachment
General\ FmtRtfBody	SZ	IT	TC/LINK-SDD	take image alternative of RTF message body
General\ ConvertToTIF	SZ	"AlwaysComplete:TBS"	TC/LINK-SDD	TIF conversion: create 1 image for complete message
General\ ConvertToTCI	SZ	"AlwaysComplete:TBS"	TC/LINK-SDD	TCI conversion: create 1 image for complete message
General\ ConvertToTCIJ	SZ	"AlwaysComplete:TBS"	TC/LINK-SDD	TCI conversion, subformat J: create 1 image for complete message
General\ ConvertToPDF	SZ	"AlwaysComplete:TBS"	TC/LINK-SDD	PDF conversion: create 1 image for complete message
Setup\ QueueFormats	SZ	depending on customer requirements	TC/LINK-SDD	Include format character for TIF, PDF or TCI
General\ CompatibilityNoCover	DWORD	0	TC/LINK-SDD	
Topcall\ IncludeCover	DWORD	1	TC/LINK-SDD	include cover in image
TCLSM\ CertificatePath	SZ	C:\TOPCALL\SHARED	TC/LINK-SDD	Folder holding the SSL PEM files.
TCLSM\ SMSEndSecure	DWORD	2 (Default)	TC/LINK-SDD	0: no security 1: security only for certain domains 2: always security
TCLSM\ SMSEndSecDomains	MULTI_SZ		TC/LINK-SDD	list of domains for option 1
TCLSM\ SMRcvSecure	DWORD	2 (Default)	TC/LINK-SDD	0: no security 1: security only for certain domains 2: always security 3: security available, but not mandatory
TCLSM\ SMRcvSecDomains	MULTI_SZ		TC/LINK-SDD	list of domains for option 1
TCLSM\ MimeNotifFormat	DWORD	3	TC/LINK-SDD	request RFC 1891-1894 notifications
TCLSM\ UseDNS	DWORD	1 or 2	TC/LINK-SDD	use direct delivery

Name	Type	Recommended	Relevant for	Description
TCLSM\ SMFixedRecipient	SZ		TC/LINK-SDD	no smart host
TCLSM\ SMTPUser	SZ		TC/LINK-SDD	To use SMTP authentication for outbound connections, specify the value of SMTP user. Note SMTP authentication credentials (user name and password) are only applicable if Basic Authentication is enabled for Receive Connector in the Exchange Server properties.
TCLSM\ SMTPPassword	SZ		TC/LINK-SDD	Specify the value of SMTP password.
TOPCALL\ NotifMail	DWORD	1	TC/LINK-SDD	set to 1 if latest delivery feature wanted

Chapter 5

Compatibility and Conformance to Laws and Directives

This section describes compatibility and conformance to laws and directives.

Compatibility

Generated PDF attachments are compatible with Adobe Acrobat Reader 3.x and higher.

Conformance to Laws and Directives

Secure data connection: SSL v2 + v3, TLS 1.0 (RFC 2246)

Certificates: PEM, X.509, RSA RC4 (128 bit)

Certificate issuer: any conformant to the above e.g. Thawte (VeriSign)

Chapter 6

Performance

Test Environment

Performance tests were done on two link computers, connecting to a high performance TCOSS system.

Link PC 1

- Hardware: Intel® Core™ 2 Duo CPU E6850 3.0 GHz
- 4 GB Ram
- Windows Server 2008 Enterprise SP1 (32 bit)
- TC/LP 2.33.11

Link PC 2

- Hardware: Intel® Xeon® X5450 3.0 GHz, 2 processors
- 8 GB Ram
- Windows Server 2008 Standard SP2 (64 bit)
- TC/LP 2.33.11

TCOSS

- Hardware: Intel® Xeon® X5450 3.0 GHz, 2 processors
- 8 GB Ram
- Windows Server 2008 Standard SP2 (64 bit)
- TC/SP 7.86.01
- TCOSS with 10 C0 Channels

Test Results

The tests measured the time needed for sending 3 page PDF messages via the local area network. The destination server was a TC/LINK-SM instance, which was statically configured as the smart host used by TC/LINK-SDD. Thus, the test covered only message transmission. With real mail servers (like MS Exchange), the performance can be different. The following operations can take additional time: DNS resolution of the target address, SSL certificate check by the target server, mailbox lookup by the target server.

Test scenario	Test computer	Messages per hour (SSL)	Messages per hour (no SSL)	Messages per hour (total)
1 instance TCLINK-SDD – SSL 1 instance TCLINK-SDD – no SSL	Link PC 1	2604	2406	5010
1 instance TCLINK-SDD – SSL 1 instance TCLINK-SDD – no SSL	Link PC 2	2888	2963	5851

Test scenario	Test computer	Messages per hour (SSL)	Messages per hour (no SSL)	Messages per hour (total)
2 instances TCLINK-SDD – SSL 2 instances TCLINK-SDD – no SSL	Link PC 2	5518	4904	10422
1 instance TCLINK-SDD – SSL 1 instance TCLINK-SDD – no SSL 1 instance TCLINK-SDD – SSL 1 instance TCLINK-SDD – no SSL	Link PC 1 Link PC 2	5203	5483	10686
2 instances TCLINK-SDD – SSL 2 instances TCLINK-SDD – no SSL 2 instances TCLINK-SDD – SSL 2 instances TCLINK-SDD – no SSL	Link PC 1 Link PC 2	6125	6079	12204

Chapter 7

Restrictions

This section describes the restrictions of TC/LINK-SDD.

Limited Number of User Profiles in KCS

There is only a limited number of user profiles in KCS (for alternative address routing via rr99).

If there are many business partners that shall be addressed automatically via email, this may be a limitation. The current limit is approx. 50.000.

Only TC/LINK Can Use SDD

SDD cannot be used for messages sent via TCFW, as TCFW provides does not convert file attachments to KCS image format.

Masks Cannot Be Used with rr99 Routing

If rr99 is used to route outgoing faxes to TC/LINK-SDD, you cannot specify additional mask parameters in the recipient address.

Features Restricted to Special Link Types

This document describes several new TC/LINK features that enable TC/LINK-SDD to send emails that look like faxes.

Although most of these features can also be used with other link types, some features will not work correctly with links that fetch more than 1 TCOS send order at a time.

Such link types are: TC/LINK-MX, TC/LINK-GW, TC/LINK-SC, TC/LINK-X4, TC/LINK-FI (if *Options\MaxActiveRecp* > 1), TC/LINK-MQ (if *Options\MaxActiveRecp* > 1).

Coversheet variables (General\CompatibilityNoCover = 0):

If configured to include the coversheet in the message sent to the remote mail system, the link types mentioned above create coversheet data that are correct only for the first send order. This means, a

message addressed to 2 recipients will have only 1 coversheet, and the mail entry variables are filled with the first recipient's data.

Sending copy (AlwaysComplete:S):

If configured to create a sending copy, the links mentioned above will create a sending copy for all recipients, even if it was only requested for the first recipient.

No SSL Reception from Exchange 2000 Internet Connector

Due to an error, secure receiving from the Internet connector of Microsoft Exchange 2000 is not possible. With other supported Exchange versions, SSL reception works fine.