

Kofax Communication Server

TC/Web Installation and Configuration Manual

Version: 10.2.0



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1. INTRODUCTION

TC/Web Access is an internet application providing access to the Kofax Communication Server via a web browser. As it is an internet application, no installation of a TC/Web client is necessary. It is immediately accessible from a web browser.

This manual describes how to install and configure TC/Web. The manual is intended to be used together with the TC/Web User Manual. An effort has been made to reduce redundant information. Therefore, the installation manual contains much information useful to a system administrator.

Important! The Kofax Communication Server and its components formerly used the name TOPCALL. Some screen shots and texts in this manual may still use the former name.

1.1 Advantages of TC/Web System

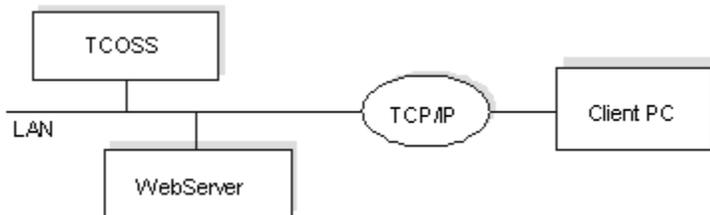
- Access the Kofax Communication Server without installing any components on the client PC.
- A system upgrade does not require the installation of new clients.
- Saves storage capacity on linked mail system using the Metamail feature.
- The application service provider can offer a unified messaging service to many customers.
- TC/Web's functionality and graphical interface is highly customizable.

1.2 Structure of the Product

TC/Web is a web application built from Microsoft ASP pages and COM objects and running on the Microsoft Internet Information Server. ASP pages are script files written in Visual Basic Script which are interpreted by the web server and transformed into HTML pages. The HTML pages are delivered to the browser.

TC/Web is installed on one server. No installation is required at the user's workstation.

All data is stored on the server, no data on the client.



2. REQUIREMENTS

Requirements for TC/Web Version 6.03.00 or higher

- Hardware requirements depends on your needs and operating system
- Supported operating systems:
 - Windows Server 2008 with Microsoft Internet Information Server 7 or
 - Windows Server 2012 with Microsoft Internet Information Server 8
- ASP.NET version 4.0, build 30319 (or a later 4.0 build)
- TCOSS release 7.56.00 or higher
- If you are using TC/Web and TCfW for changes in user profiles, both clients must belong to the same KCS version.
- TFC Version 1.13.00 or higher (installed by Setup program)
- TCSI Version 2.55.00 or higher (installed by Setup program)
- TCLIB Version 7.20.01 or higher (installed by Setup program)
- For archive functionality, TCARCH release 2.10.00 or higher must be used
- For message and job sending functionality, TC/LINK-SM 2.00.00 or higher
- TC/Resolve version 1.05.00 required for TC/Broadcast installations
- To run TC/Web a TCWeb/TCJAVA license is needed.
If you update from TCJAVA, no change of license will be necessary.
Only for new installations a new license is needed.
- User's workstation
 - Any operating system
 - Mozilla compatible browser such as Firefox
 - Microsoft Explorer 6.0 or higher
 - minimum screen size 800 x 600
- User's browser configuration
 - Cookies must be enabled in the Browser and must not be blocked by a firewall
 - JavaScript must be enabled
 - Popup windows must be possible
 - Java must be enabled
- To use TC/Web over a secure https connection, an SSL certificate must be installed on IIS.

3. INSTALLATION

3.1 Upgrade from TC/Web 3.x and 4.x to 5.x

In the case of an upgrade from previous TC/Web versions 3.x or 4.x (based on Microsoft ASP technology) to TC/Web 5.x (based on ASP.NET technology) following steps must be performed at the beginning:

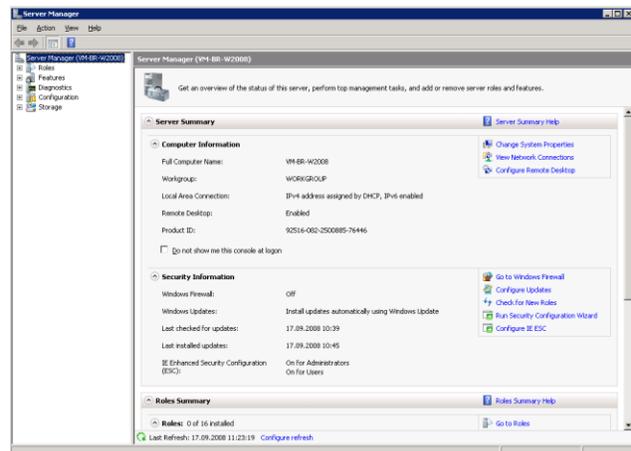
1. Stop the Internet Information Server (IIS) by the command
iisreset /stop <Enter>
2. Stop the TCDISTMF2 service by the command
net stop tcdistmf2 <Enter>
3. Rename directory c:\tcross\tcweb to something different, for example c:\tcross\tcweb.asp.
4. In the case any customizations were implemented in one of the following directories
tcweb\config
tcweb\brand
tcweb\brand_custom
save customized files to any separate place as you will need to copy them back to the same location in the c:\tcross\tcweb directory after the TC/Web setup has been finished.
5. If you are using TC/MetaMail, the static part of its URL (configured in the registry value HTTPAddress, see TC/Metamail manual) must be changed manually to use ASP.NET like page extension “aspx” instead of “asp”.

Note: These steps are necessary due to fundamental changes in the Web technology being used for TC/Web (Microsoft ASP versus ASP.NET).

3.2 Installation of Internet Information Server: Part One

3.2.1 Windows Server 2008 and IIS7

Start Server Manager (Start menu->All Programs->Administrative Tools->Server Manager), and select Roles. All installed roles will be displayed.

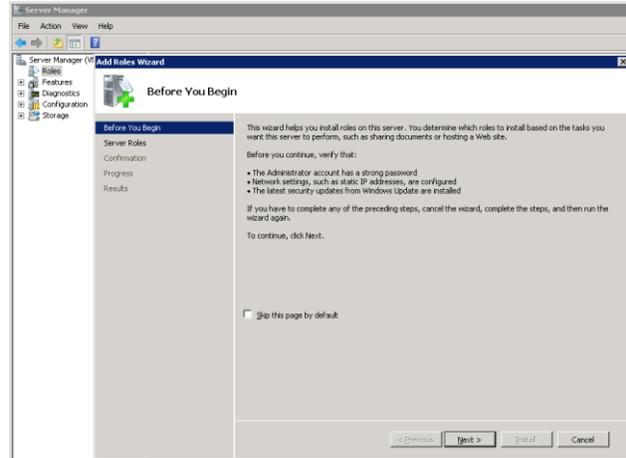


Picture 1: Server Manager Screen



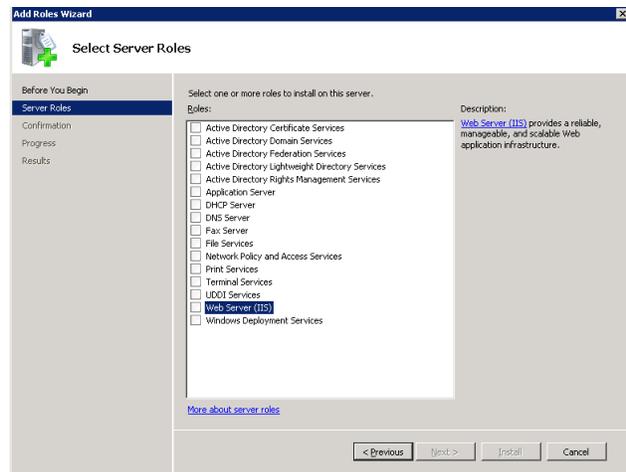
Picture 2: Server Manager Roles

Click Add Roles. The Add Roles Wizard opens. Then click Next.



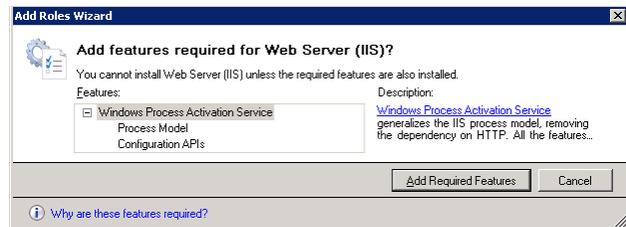
Picture 3: Server Manager Add Roles Wizard

Select Web Server (IIS). Note that Add Roles Wizard notifies you on any required dependency: as Web Server role depends on Windows Process Activation Service (WAS), the following window appears:



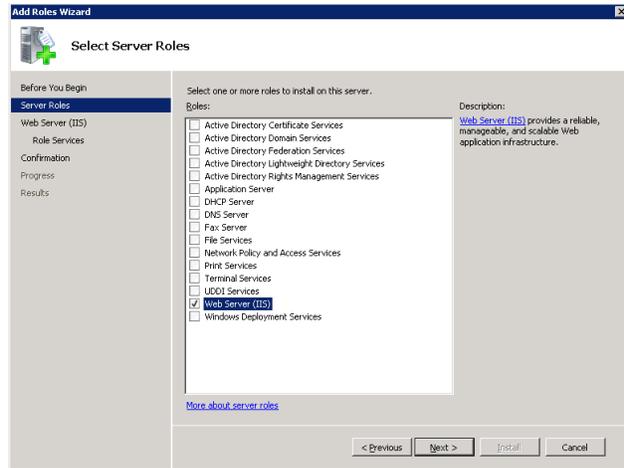
Picture 4: Server Manager Select Server Roles

Click Add Required Features to continue.



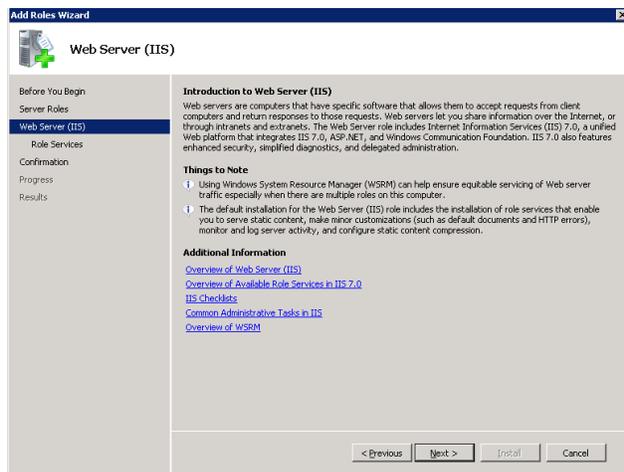
Picture 5: Server Manager Select Server Roles

Web Server is now ready to install, click Next.



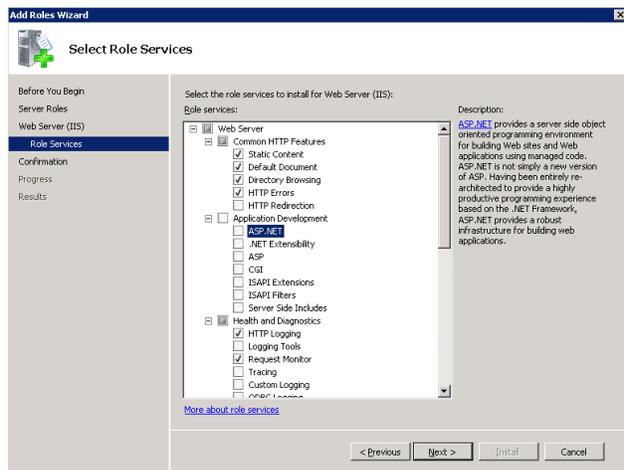
Picture 6: Server Manager Web Server Selected

Web Server information window appears, click Next.



Picture 7: Server Manager Web Server Installation

Now the Add Roles Wizard shows a list of all IIS 7.0 features available to install. The default features are pre-selected. Select ASP.NET (in the Application Development group, which is a little confusing, but this is necessary NOT ONLY for application development, but for hosting of ASP.NET applications as well) and the following informational window appears:



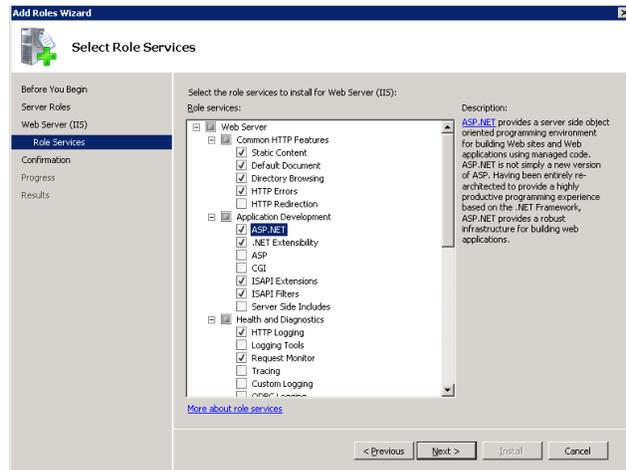
Picture 8: Server Manager ASP.NET Installation

Click Add Required Role Services and following screen appears:



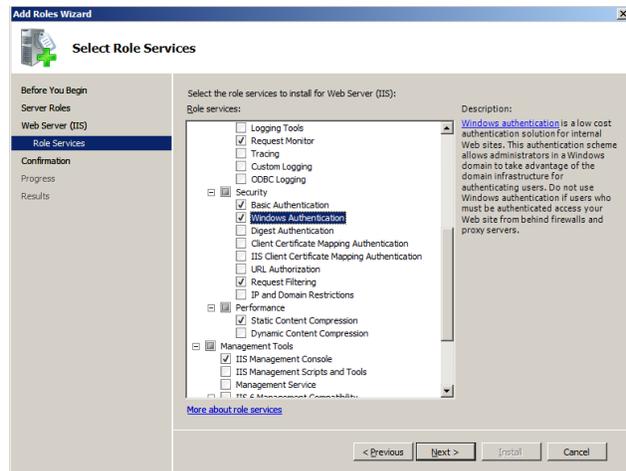
Picture 9: Server Manager ASP.NET Services

Click Next and the Add Roles Wizard presents a summary of what is going to be installed:



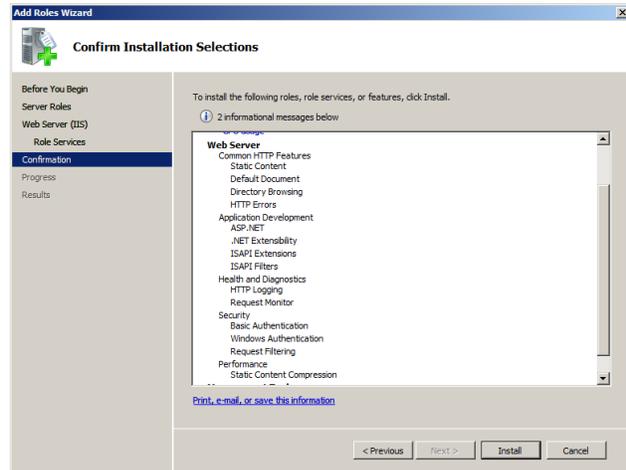
Picture 10: Server Manager ASP.NET Installation

Scroll down the role services list until you see the Security service. Select Basic and Windows Authentication and click Next:



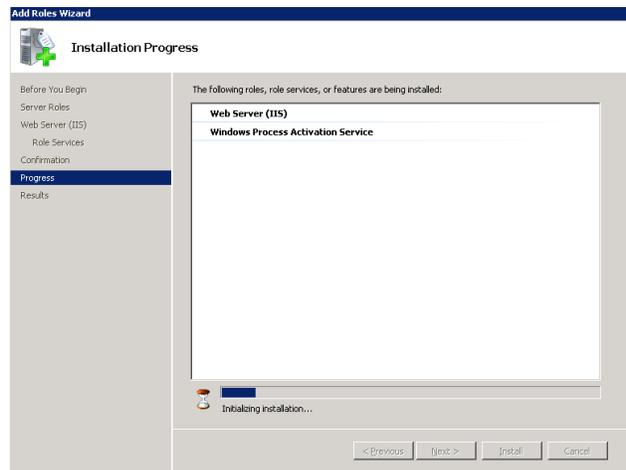
Picture 11: Server Manager ASP.NET Installation

On the Confirm Installation Selections screen click Install:



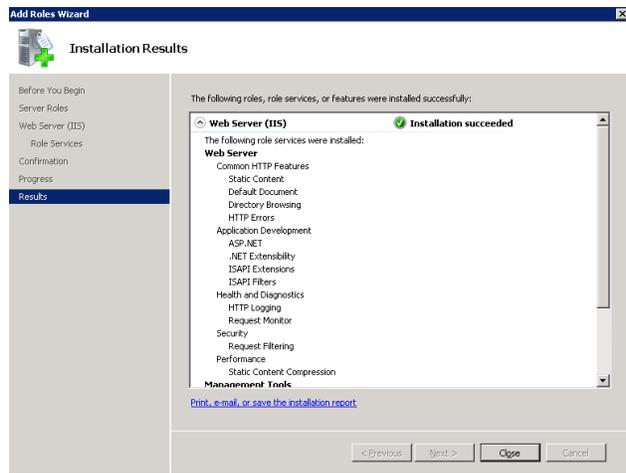
Picture 12: Server Manager Confirm Installation

Installation Progress window appears. Wait until final Web Server install screen appears.



Picture 13: Server Manager Installation Progress

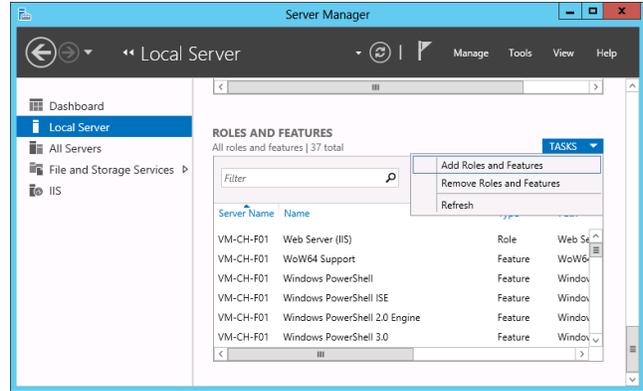
Click Close to finish the installation.



Picture 14: Server Manager Installation Results

3.2.2 Windows Server 2012 and IIS8

Start Server Manager and select Local Server. Scroll down to Roles and Features. All installed roles and features are listed.

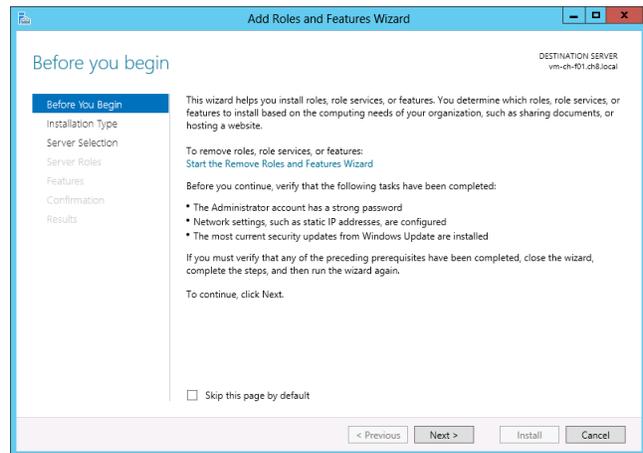


Picture 15: Server Manager: Roles and Features

Expand Tasks and click Add Roles and Features. The Add Roles and Features Wizard opens. Then click Next.

Select “Role-based or feature-based installation” if you are installing IIS locally. Click Next.

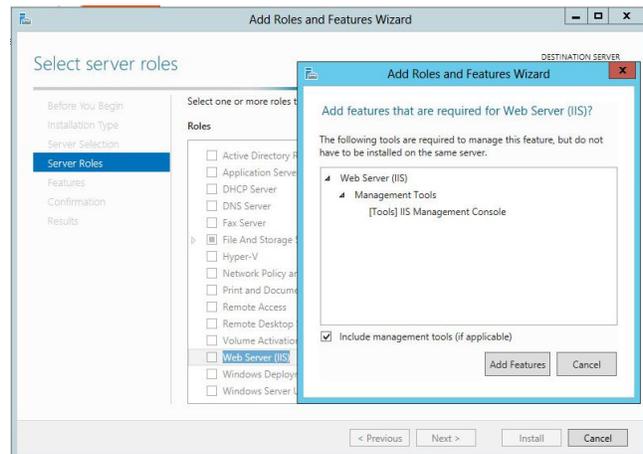
Select the destination server. Click Next.



Picture 16: Add Roles and Features Wizard

From the Server Roles tab, select “Web Server (IIS)”. The wizard will notify you if you need to install any additional roles or features necessary for IIS.

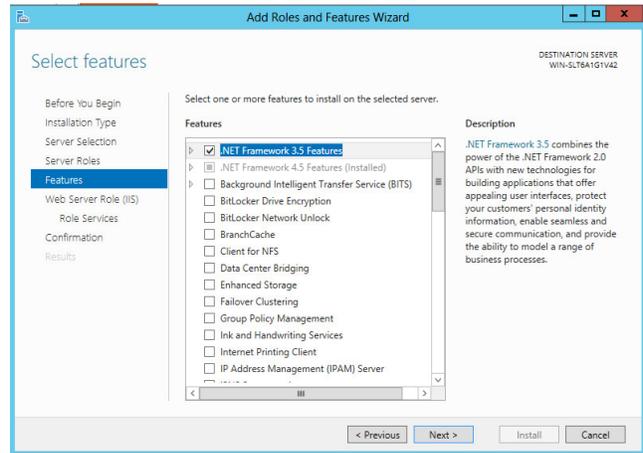
Click Next.



Picture 17: Server Manager Select Server Roles

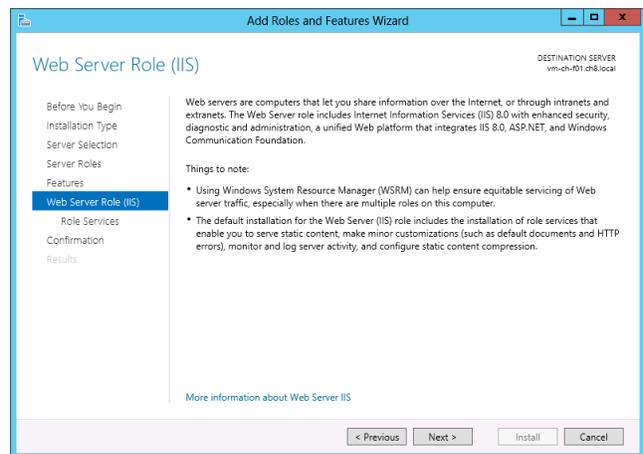
From the Features tab, select “.NET Framework 3.5 Features”.

Click Next.



Picture 18: Server Manager Select Features

Web Server Role (IIS) information window appears. Click Next.



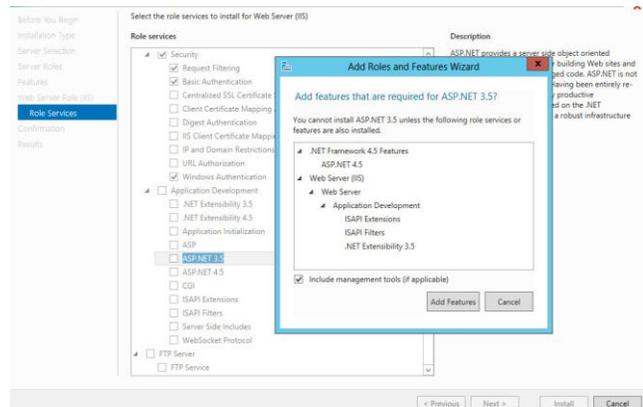
Picture 19: Server Manager Web Server Installation

The wizard list of all IIS 8.0 role services available to install; default features are pre-selected.

From the Security group, select Basic Authentication and Windows Authentication.

From the Application Development group, select ASP.NET 3.5 (necessary for hosting ASP.NET applications).

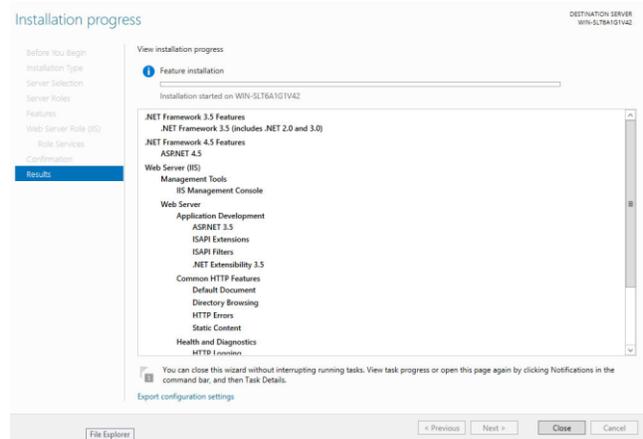
The wizard will notify you if you need to install any additional roles or features.



Picture 20: Server Manager ASP.NET Installation

Click Next and the wizard presents a summary of what is going to be installed.

Click Install and wait until IIS is installed.

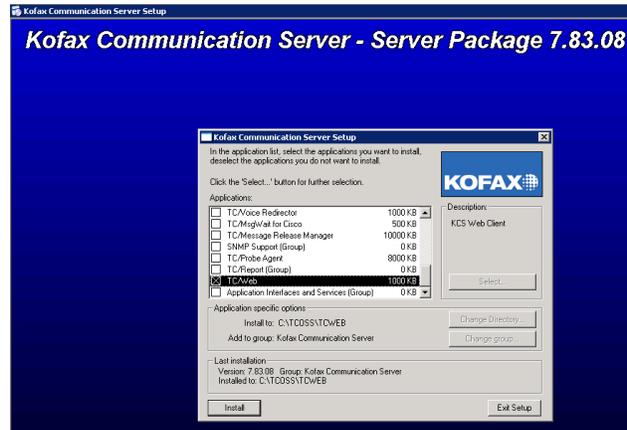


Picture 21: Server Manager ASP.NET Installation

3.3 Installation of TC/Web

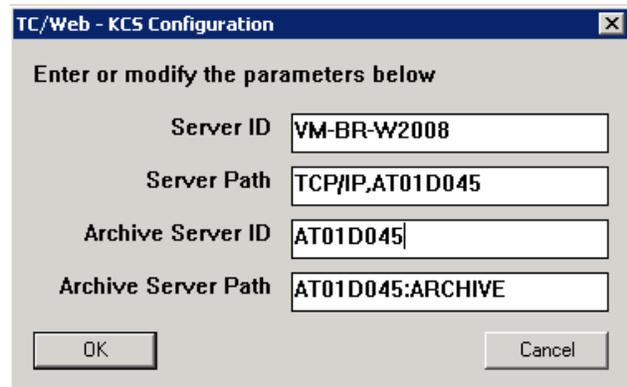
The TC/Web installer is part of Kofax Communication Server setup.

Run the setup of the Kofax Communication Server and select "TC/Web".



Picture 22: Select TC/WEB from the KCS Setup

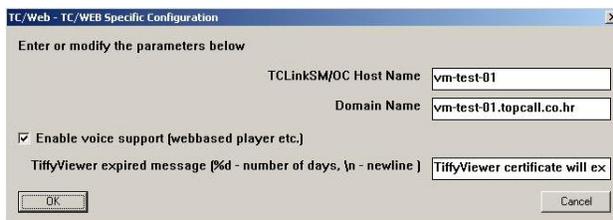
Enter the used TCOSS Server parameters.



Picture 23: TCOSS Server configuration

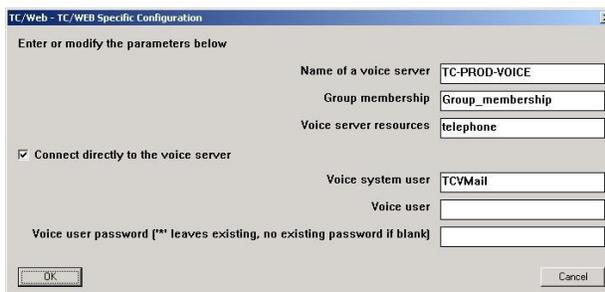
Next, type the host name and domain name of the computer running the TC/Link SM/OC. Additionally, voice support can be enabled (web-based player).

Furthermore, you can specify the warning message that will indicate the approaching expiration of the TiffyViewer certificate.



Picture 24: TC/WEB Configuration I.

If the voice support was enabled in the last screen, the voice server must be entered here, as well as the parameters “Voice system user”, “Voice user” and “Voice user password”.



Picture 25: TC/WEB Configuration II.

These values will be stored in the following registry values in the registry subkey HKLM\Software\TOPCALL\TCWEB:

Key name	Description	Type	Default
SuperInternalVoice	Password of the user to be used to access the TCVMail user profile for Voice Configuration.	STRING	[blank]
SuperUserVoice	ID of the user to be used to access the TCVMail user profile for Voice configuration.	STRING	[blank]
VoiceSystemUser	User ID of the user where the System Voice Greetings are stored.	STRING	TCVMail

The setup is complete. Restart the computer.

3.4 Installation of Internet Information Server: Part Two

3.4.1 Windows Server 2008 R2 and IIS7.5

Windows Server 2008 R2 is being shipped with the version 7.5 of IIS, which improves the concept of Sites, Applications and Virtual Directories. Applications and Virtual Directories are separate objects which exist in a hierarchical relationship in the IIS7.5 configuration scheme. Simply put, a site contains one or more applications, an application contains one or more virtual directories and a virtual directory maps to a physical directory on a computer.

On the other hand, in IIS6 an application was really just a virtual directory (although applications and virtual directories were also defined as separate objects), which was quite confusing.

In IIS7.5, each site must have so called root (or default) application, but this default application is not being displayed on the site's Application page. All configuration settings for the site's default application must be performed at the site level in IIS7.5 Manager.

These differences between IIS 6 and IIS7.5 imply also the way how the TC/Web is configured in the IIS7.5. While in the IIS6 the TC/Web was just a virtual directory, in the IIS7.5 it must be an application.

The simplest method is to set up TC/Web as the Default Web Site:

Note: To install and run KCS Portal application successfully, from KCS 10.1.1 onwards, it is suggested to set TC/Web as Application in Default Web Site.

Start the Internet Information Services (IIS) Manager (Start->All Programs->Administrative Tools->Internet Information Services (IIS) manager).

Expand the computer icon. Expand the “Sites” icon. Click on the “Default Web Site” icon. In the Actions tab on the right side, click Advanced settings:

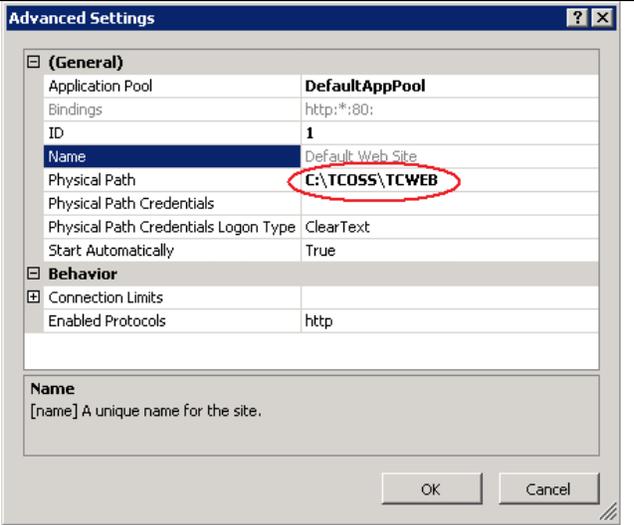


Picture 26: Configure the default application

Enter the path of the TC/Web directory to the field Physical path.

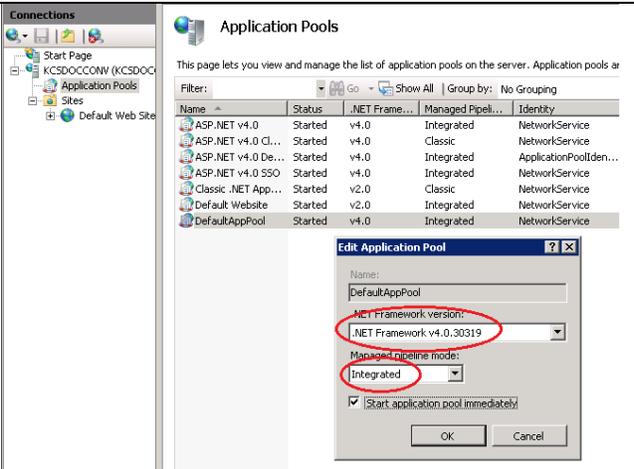
This must be “C:\TCOSS\TCWeb”, because this is the path where the TC/Web files were installed to.

Leave the Application Pool be assigned to DefaultAppPool. Click OK.



Picture 27: Set physical path

Verify the properties of the default application pool: Click on the Application Pools in the Connections tab and double-click the DefaultAppPool in the Application Pool tab: The .Net Framework must be version 4.0, build 30319 (or a later 4.0 build) and the pipeline mode must be set to integrated



Picture 28: Check .Net Framework version

TC/Web is now set up to be used as the Default Web Application on the IIS7.5. Being the default application, clients only need to enter <http://servername> in the browser, and the TC/Web will respond.

Note: The first user login after setting up TC/Web (or after each subsequent IIS reset) may last longer, even a minute or two. The delay is caused by the fact that the IIS has to compile all TC/Web files and with .NET framework. The compilation starts when a particular ASP.NET application is used for the first time.

Note: It is not necessary to explicitly enter the KCS MIME types and the default document (default.aspx) as it was on Windows 2003 and IIS6. These settings are configured in the web.config file that is part of TC/Web application, and are automatically imported into IIS7.5 configuration.

Note: Perform the additional steps as described in section 3.4.1.1 *Additional Steps*.

Although TC/Web is set up as the Default Web Site, it may be sometimes useful (test purposes, different application is already assigned as the default one, etc.) to be able to set it up also as a particular application in one of the configured Sites, typically Default Web Site.

Note: It is not possible to set up TC/Web as both Default Web Site and as a particular application in the same (Default Web) Site at the same time!

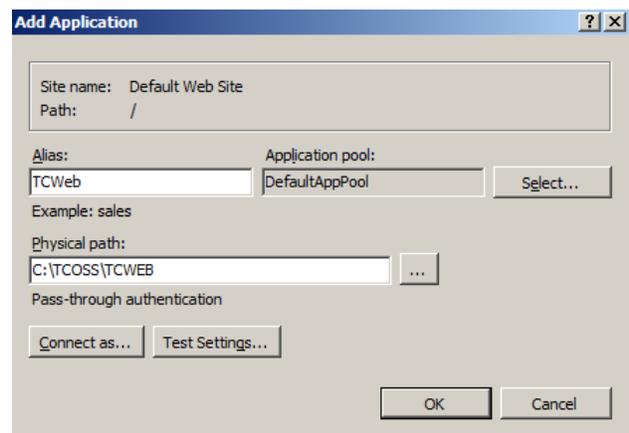
In order to set up TC/Web as the “TCWeb” application in the Default Web Site, perform the following steps:

Start the Internet Information Services (IIS) Manager (Start->All Programs->Administrative Tools->Internet Information Services (IIS) manager).

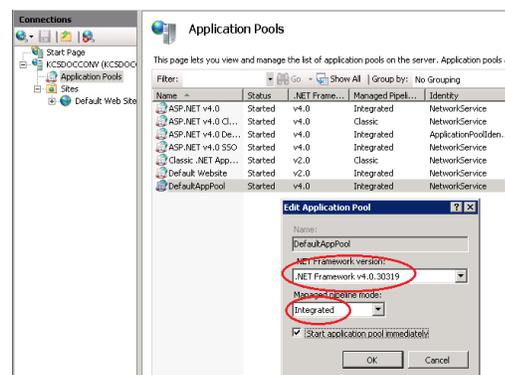
Expand the computer icon.
Expand the “Sites” icon.
Click on the “Default Web Site” icon.

In the context menu, choose Add Application.
In the Add Application window, enter the Alias (for example “TCWeb”).
Next, enter the path of the TC/Web directory.
This must be “C:\TCOSS\TCWeb”, because this is the path where the TC/Web Access files were installed to. Leave the Application Pool be assigned to DefaultAppPool. Click **OK**.

Verify the properties of the default application pool:
Click on the Application Pools in the Connections tab and double-click the DefaultAppPool in the Application Pool tab: The .Net Framework must be version 4.0, build 30319 (or a later 4.0 build) and the pipeline mode must be set to **Integrated**.



Picture 29: Configure the TCWeb application



Picture 30: Check .Net Framework version

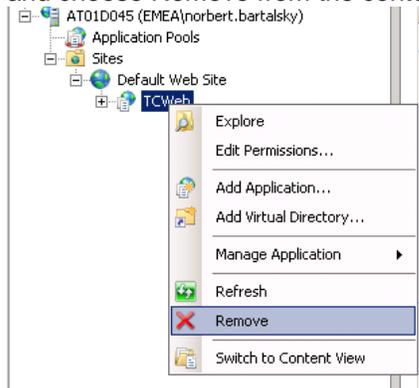
TC/Web is now set up to be used as the TCWeb Application in the Default Web Site in the IIS7.5. Being the particular application with alias “TCWeb”, clients need to enter <http://servername/tcweb> in the browser, and the TC/Web will respond.

Note: For security reasons, IIS7.5 request filtering is configured by default in the TC/Web web.config file to suppress serving of these files:

- .xml -xml files
- .dtd -dtd files
- .exe -executable files
- .dll -dynamic link library files
- .h -header files

How to change TC/Web settings:

- In the case TC/Web is setup as a Default Web Site's default application, select the Default Web Site icon and click on the basic settings in the Actions tab. For example, you can remove TC/Web simply by setting the physical path to a different valid directory (not C:\TCOSS\TCWEB)
- In the case TC/Web is set up as the TCWeb application in the Default Web Site, select TCWeb icon and click on the basic settings in the Actions tab. In order to remove TCWeb application, select TCWeb icon and choose Remove from the context menu:

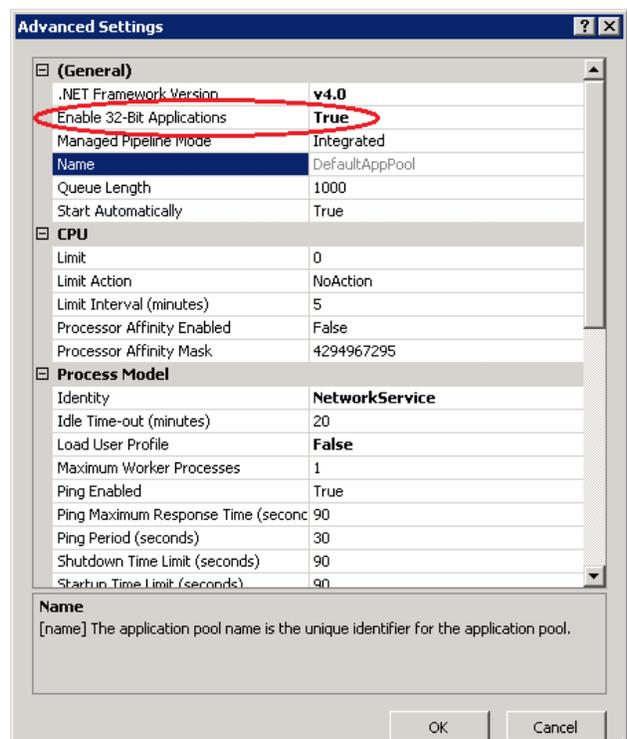


3.4.1.1 Additional Steps

Click on the Application Pools in the Connections tab, right click on the DefaultAppPool and select "Advanced Settings..."

Change the "Enable 32-bit Applications" to True (if you want the application pool to spawn in a 32-bit mode).

Click OK.



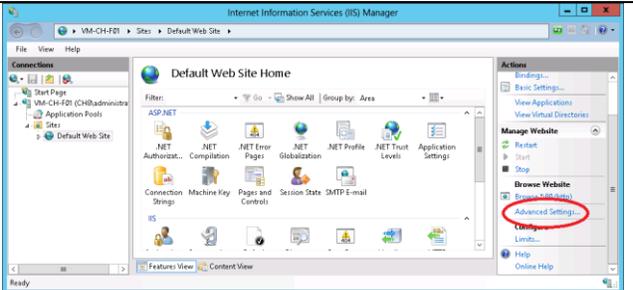
3.4.2 Windows Server 2012 and IIS8

Configuration of IIS8 is similar to the IIS7.5.

The simplest method is to set up TC/Web as the Default Web Site:

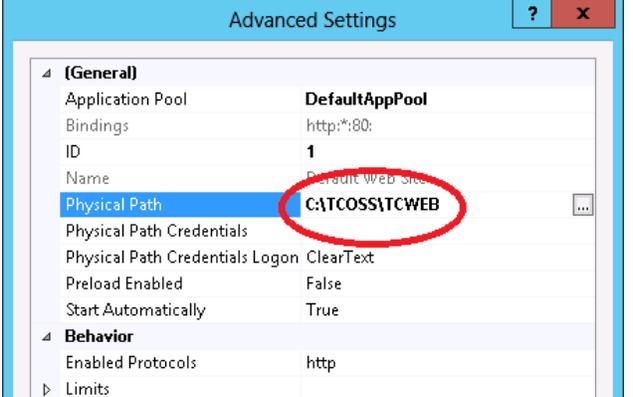
Note: To install and run KCS Portal application successfully, from KCS 10.1.1 onwards, it is suggested to set TC/Web as Application in Default Web Site.

Start the Internet Information Services (IIS) Manager.
 Expand the computer icon. Expand the “Sites” icon.
 Click on the “Default Web Site” icon. In the Actions tab on the right side, click Advanced settings:



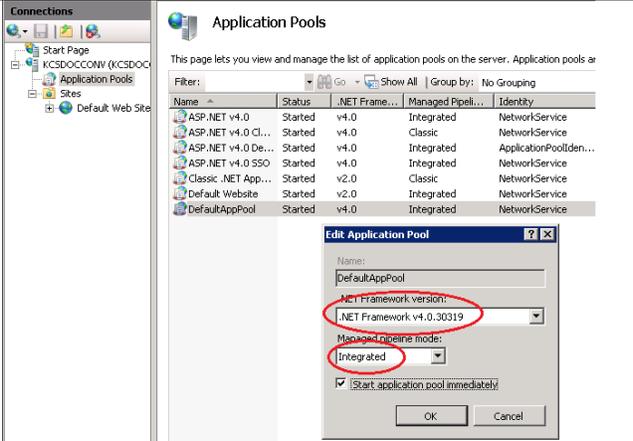
Picture 31: Configure the default application

Enter the path of the TC/Web directory to the field Physical Path.
 This must be “C:\TCOSS\TCWeb”, because this is the path where the TC/Web files were installed to.
 Leave the Application Pool be assigned to DefaultAppPool. Click OK.



Picture 32: Set physical path

Verify the properties of the default application pool:
 Click on the Application Pools in the Connections tab and double-click the DefaultAppPool in the Application Pool tab: The .Net Framework must be version 4.0, build 30319 (or a later 4.0 build) and the pipeline mode must be set to **Integrated**.

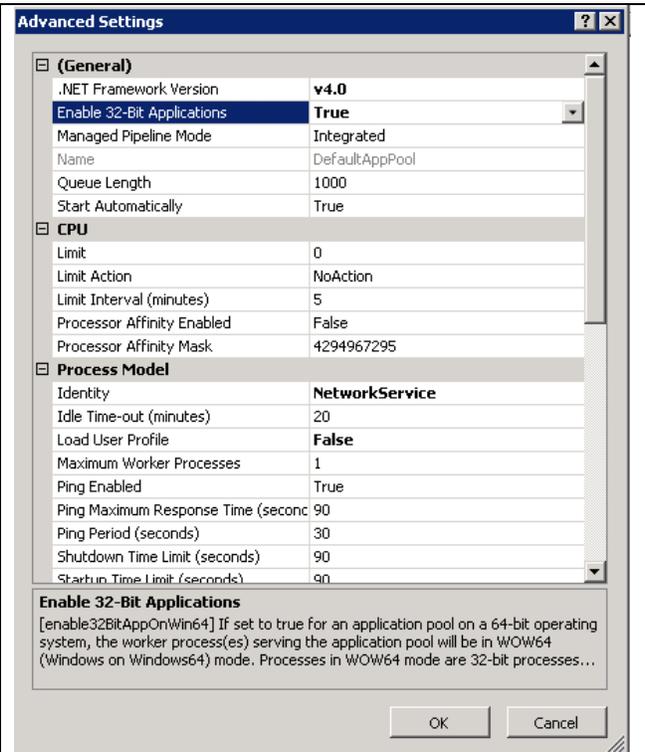


Picture 33: Check .Net Framework version

Click on the Application Pools in the Connections tab, right click on the DefaultAppPool and select “Advanced Settings...” or select the same from the Actions pane after selecting the Application pool

Change the “Enable 32-bit Applications” to True (if you want the application pool to spawn in a 32-bit mode)

Click OK.



Picture 34: Advanced Settings

TC/Web is now set up to be used as the Default Web Application on the IIS8. Being the default application, clients only need to enter <http://servername> in the browser, and the TC/Web will respond.

Note: The first user login after setting up TC/Web (or after each subsequent IIS reset) may last longer, even a minute or two. The delay is caused by the fact that the IIS has to compile all TC/Web files and with .NET framework. The compilation starts when a particular ASP.NET application is used for the first time.

Note: It is not necessary to explicitly enter the KCS MIME types and the default document (default.aspx) as it was on Windows 2003 and IIS6. These settings are configured in the web.config file that is part of TC/Web application, and are automatically imported into IIS8 configuration.

Although TC/Web is set as the Default Web Site, it may be sometimes useful (test purposes, different application is already assigned as the default one, etc.) to be able to set it up also as a particular application in one of the configured Sites, typically Default Web Site.

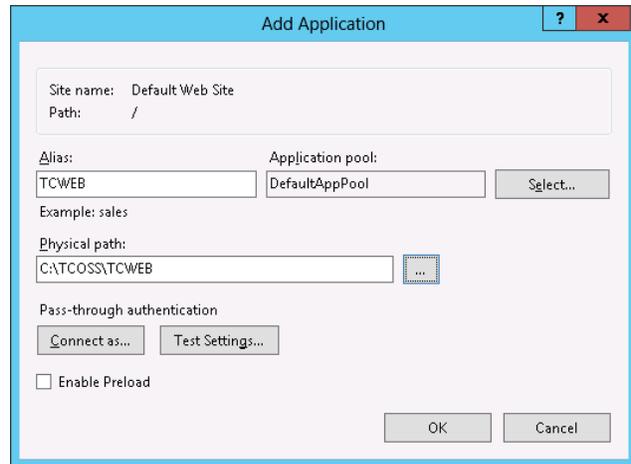
Note: It is not possible to set up TC/Web as both Default Web Site and as a particular application in the same (Default Web) Site at the same time!

In order to set up TC/Web as the “TCWeb” application in the Default Web Site, perform the following steps:

Start the Internet Information Services (IIS) Manager.

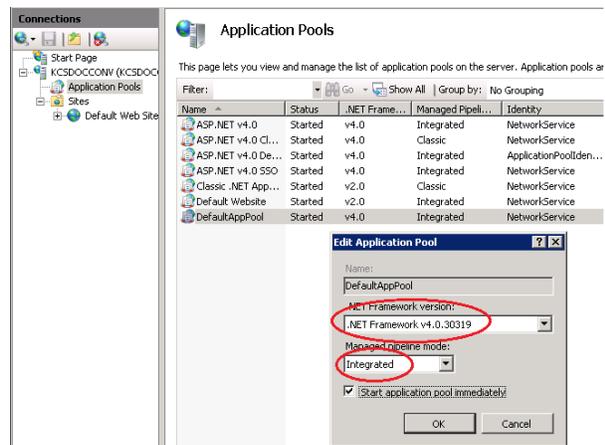
Expand the computer icon.
Expand the “Sites” icon.
Click on the “Default Web Site” icon.

From the context menu, select Add Application.
In the Add Application window, enter the Alias (for example “TCWeb”).
Next, enter the path of the TC/Web directory. This must be “C:\TCOSS\TCWeb”, because this is the path where the TC/Web Access files were installed to. Leave the Application Pool be assigned to DefaultAppPool. Click OK.



Picture 35: Configure the TCWeb application

Verify the properties of the default application pool:
Click on the Application Pools in the Connections tab and double-click the DefaultAppPool in the Application Pool tab: The .Net Framework must be version 4.0, build 30319 (or a later 4.0 build) and the pipeline mode must be set to integrated.



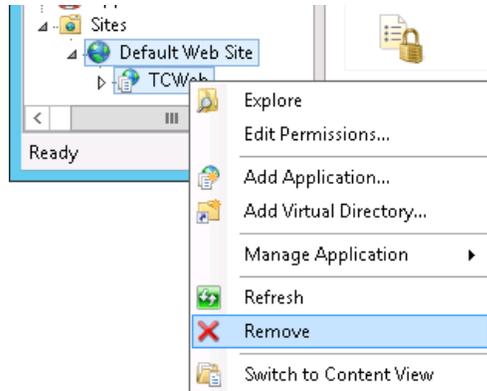
Picture 36: Check .Net Framework version

TC/Web is now set up to be used as the TCWeb Application in the Default Web Site on the IIS8. Being the particular application with alias “TCWeb”, clients need to enter <http://servername/tcweb> in the browser, and the TC/Web will respond.

How to change TC/Web settings:

- In the case TC/Web is setup as a Default Web Site’s default application, select the Default Web Site icon and click on the basic settings in the Actions tab. For example, you can remove TC/Web simply by setting the physical path to a different valid directory (not C:\TCOSS\TCWEB)
- In the case TC/Web is set up as the TCWeb application in the Default Web Site, select TCWeb icon and click on the basic settings in the Actions tab. In order to remove TCWeb application, right-click TCWeb

icon and select Remove from the context menu:



3.5 TC/Web User Authentication and Authorization

Each request from the TC/Web user (from client browser) is at first authenticated by the IIS server according to the authentication mode configured in order to verify the user's identity.

For TC/Web, two authentication modes are possible:

1. Anonymous authentication
User request are not being authenticated by the IIS, and they run in the context of the default user's identity configured in the assigned application pool (like Network service, ApplicationPoolIdentity). Therefore the user must at first authenticate through TC/Web login mask with his KCS credentials in the KCS Server and he will be authorized to utilize KCS functions according to user rights set in his KCS user profile.
2. Windows Authentication
Determines user's identity based on their Windows login, works fine in the company's intranet. If a user is logged in to the Windows on his client computer with his domain account, the browser populates his security token to the IIS server and IIS recognizes his identity and usually the user does not have to login to the browser again. But although authenticated as Windows identity, execution of user requests in the IIS also runs in the context of the default identity (like Network service, ApplicationPoolIdentity).

Prior to KCS 10.0.1, so called Autologon mode was supported by TC/Web utilizing Windows authentication, which was working with KCS userId being either Windows user name only, or concatenated form of "domainUsername" (domain and username concatenated without any separation character) **but this method was very unsecure and is not recommended anymore.** (Furthermore, this logon type would be blocked by the KCS Server later than 10.0.1 running with SecurityLevel=40).

Starting with KCS 10.0.1, Autologon works in very secure way up to the KCS Server and can be seen as the most secure authentication as no password is transferred over the wire, neither between browser and the IIS server, nor between IIS and KCS Server. In the KCS server, corresponding user profile is selected according to user's Windows username and domain (where KCS userId must be equal to Windows principal user name in the form of username@domain) and he will be authorized to utilize KCS functions according to user rights set in this KCS user profile. This KCS user profile must have the LAN login right enabled.

Please refer to the chapter Configuration->Autologon for details

3.6 TC/Web User Authentication and Authorization Requirements

Following NTFS access permissions must be set for Windows identity (like Network Service) configured in the TC/Web's application pool:

Account	Resource	Required NTFS Permissions
Network Service	TcWeb folder and subfolders	Read and Execute, Write
Network Service	TOPCALL\Shared	Read and Execute
Network Service	TCOSS\Trace	Read and Write
Network Service	C:\ root folder and subfolders	List Folder Contents

Note: Network Service accounts is implicit members of the built-in Users group (through the Authenticated Users group). On a default Windows installation, the Users group gets following permissions for non-system folders on the C:\ drive:

- Read and Execute
- List Folder Contents
- Special permission, Create Files and write data
- Special permissions, Create Folders and Append data

If this is the case, there is no need to enter any explicit permissions according to the table above!

Following permissions must be set for the Network Service account:

- Write access on these registry hives
 HKLM\Software\TOPCALL
 HKLM\SYSTEM\CurrentControlSet\Services\EventLog\Application\TCRT (This registry key exists only if Voice support is installed)
 Set the permissions with RegEdit. Otherwise, many event log entries may be generated.
 (If IIS were not given the right to write to HKLM\Software\TOPCALL, TC/Web could not create many registry values during the first start and could not encrypt passwords entered in registry either.)
- Create and activate TCDISTMF2 COM object.
- On an ASP system with multiple TCOSS instances, it must have read and write access to the TCROUTE routing database and to the cached XML files.
 Please see the TC/Broadcast manual for details on these items.

Note: Please perform the IIS reset command (iisreset) after any permissions have been changed according to the points above!

Restriction: Granting of these permissions would not help in case TC/Web is working in autologon mode, which requires Windows authentication and Impersonation, which means each Windows domain user would need also these permissions.

It is documented in the following bug:

Bug 1151744: TC/WEB configured for Autologon generates TCOSS Eventlog entries with ID 16104

3.6.1 View and/or Change User Account

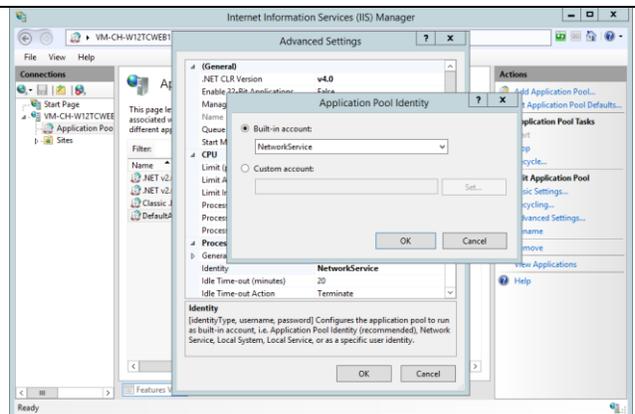
(Applies to both IIS7 and IIS8)

Open IIS Manager.

Select Application Pools in the Connections tab, click on the DefaultAppPool and choose Advanced Settings from the Actions tab

In the Application Pool Identity window, one of the built-in accounts can be chosen: Local Service, Local System, Network Service or Application Pool Identity.

It is recommended to choose “Network Service”.



Picture 37: IIS8 TC/Web User Account

3.6.2 Default Permissions for the TCDISTMF2 Service

By default the permissions for TCDISTMF2 service are set to allow Local Launch and Local Activation to Everyone. These settings are applied each time KCS is installed.

If it is necessary to improve the security (for example, restrict Launch and Activation only to IIS user in which security context TC/Web is running), these settings must be changed manually – for instructions, please refer to chapter 3.6.3. This must be repeated after each KCS installation.

3.6.3 Setting Permissions for the TCDISTMF2 Service

Note: Performing the steps in this chapter is only necessary if you want to modify the default security settings (see chapter 3.6.2 *Default Permissions for the TCDISTMF2 Service*).

(Applies to both IIS7 and IIS8)

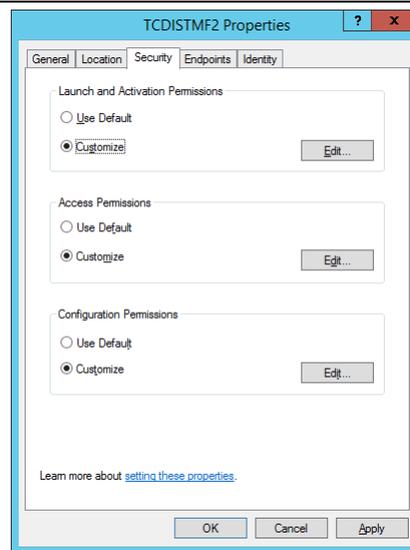
Start “Component Services”.

Navigate to My Computer\DCOM Config\TCDISTMF2.

Select Properties from the context menu.

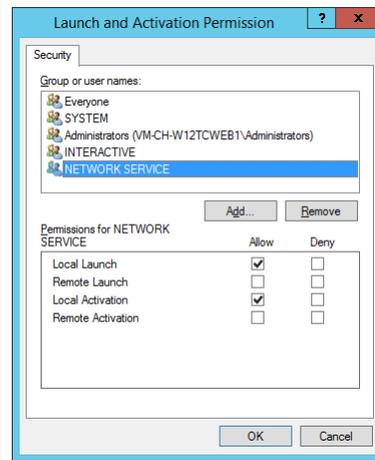
Go to the Security tab.

Set “Launch and Activation Permissions” and “Access Permissions” options to “Customize”.



Picture 38: TCDISTMF2 Properties (Windows 2012)

Then, for both options, click the “Edit...” button and add to the user list the built-in account NETWORK SERVICE:



Picture 39: Necessary launch permission for the TCDISTMF2

3.7 TC/LINK-SM/OC Required to Send Messages or Jobs

Please refer to the TC/LINK-SM/OC Manual for instructions how to install the link. To ensure proper installation, stop IIS before installing the link.

The following registry value should be set:

```
.. \TOPCALL\TCLINKXX\General\AltForceBinToTci=1
```

If you forward a message with TC/Web, for technical reasons all images of the original message will be sent to the TC/Link-SM /OC as attachments to the forwarded message. Therefore, the forwarded message will not look like the original message. Setting the registry value as described above implies the conversion of attachments to images and thus the attachments can be displayed in the Image View of the forwarded message.

In order to improve the reliability of both send message and send job functions, it is recommended to upgrade the TC/LINK-SM/OC to TC/LP 2.31.07 or later and activate the Synchronous Operation mode by setting the following registry value to 10 minutes (for details refer to the TC/LINK-SM/OC Manual):

```
.. \TOPCALL\TCLINKXX\TCLSM\WaitTillPosted=10
```

With this setting, TC/LINK-SM/OC waits at first until the message being sent has been posted to the TCOSS and terminates the SMTP conversation with TC/Web afterwards. This procedure may lead to increased delays (the TC/Web user will get informative “Your message is being posted ...” screen) especially during the peak traffic hours, but the advantage is that as soon as the user receives the “Message forwarded to Server” screen, his/her message is already visible in the outbox.

If any error occur during the message processing in the TC/LINK-SM/OC (like document conversion problem, wrong recipient, etc.) the user will receive appropriate self-explanatory error message.

It is recommended also to set following value to 0:

```
.. \TOPCALL\TCLINKXX\Topcall\NonDelNfImmediate=0
```

In order to suppress sending of non-delivery notifications towards TC/Web in the case processing error would occur in the link.

Note: Without the link’s Synchronous Operation mode, if any processing error occurs in the link user will receive the information “Message Forwarded to Server”, which is incorrect as the message hasn’t been posted to the TCOSS at all and can’t be found in the user’s outbox!

3.8 Secure TC/Web with SSL

TC/Web can be made totally secure with the purchase and installation of an SSL Security Certificate from a trusted Certificate Authority. With a Security Certificate installed, the IIS web server can be configured to only accept requests over the HTTPS protocol.

Normal internet transactions consist of information sent between the client and the server in clear text with the HTTP protocol, and this information is not secure. With the HTTPS protocol, all information is encrypted before being transmitted by the client browser or the server and will be decrypted on arrival. One disadvantage of using HTTPS is that all transmissions take longer because of the overhead of encrypting and decrypting.

For further information on installing an SSL certificate, please visit the Microsoft IIS web site.

3.9 Fault Tolerant TC/Web

If TC/Web is installed on only one web server, it will not be fault tolerant. If the computer hosting the web server stops working properly, TC/Web will no longer be available to any client browsers.

TC/Web can be made fault tolerant by installing it on a number of web servers, which is known as a server farm. A server farm can most easily be created by using a hardware load balancer. A hardware load balancer is installed between the web servers and the outside network. The load balancer has a single external IP address and routes all requests for a web server to one of the servers in the server farm.

If one of the web servers stops functioning properly, all requests will be directed to a functioning server.

Any customer using TC/Web when a server stops working will lose his/her connection. But the user will be able to log-in again and continue working.

All of the TC/Web installations in the server farm should connect to a KCS server installation running on a separate server. For a fully fault tolerant installation, this KCS server should be a tandem system.

The BigIP product from F5 networks (<http://www.bigip.com>) is an example of an appropriate hardware load balancing product.

To support some HW load balancers, TC/Web supports cookie configuration. A cookie can be used to determine to which TC/Web instance the client is connected.

Key name	Description	Type	Default
ServerCookieName	Cookie name which will be set by TC/WEB. (Ex. "ServerID")	STRING	[empty]
ServerCookieValue	Cookie value which will be set by TC/WEB (Ex. "1")	STRING	[empty]

3.10 Third Party Components

TC/Web uses several third party components to implement specific functionality. These components are automatically installed by the TC/Web setup.

Tiffany Applet

The Tiffany java applet is used to display emails in an image format. This viewer is used to display fax messages.
<http://www.tiffany.de>

AspEmail

AspEmail is used by the HTML New Message and New Job forms to transmit the message from the web server to the TC/LINK-SM or TC/LINK-OC.

<http://www.aspemail.com>

AspSmartUpload

AspSmartUpload is used to upload attachments that a user attaches to an email or job.

aspSmartUpload - Copyright (c) 1995 - 2002 ADVANTYS. All rights reserved.

This product includes software developed by ADVANTYS (<http://www.advantys.com>).

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XZIP

XZIP is used to zip together multiple distribution lists when a user downloads more than one distribution list at a time.

“XZIP.dll” dll from Belus Technology

<http://www.xstandard.com/>

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3.11 Additional KCS Components

3.11.1 TC/Broadcast

Please refer to the TC/Broadcast manual for information on installation.

3.11.2 TC/Metamail

Please refer to the TC/Metamail manual for information on installation.

4. CONFIGURATION

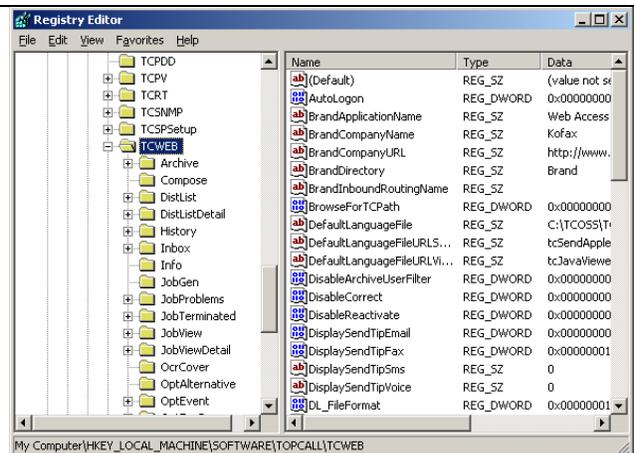
The final appearance and behavior of TC/Web depends not only on the configuration of the TC/Web application but also on the components it connects to, such as the KCS Message server, the KCS Voice server, the TC/Broadcast system, subsystems such as TCRT, TCSI and TFC, and on the configuration of the individual user profiles.

This chapter focuses on the highly configurable TC/Web application and includes some notes regarding the other components.

4.1 About the Registry

Most of the configuration data for TC/Web is stored in the Windows Registry.

TC/Web registry values are created when TC/Web is installed. User choices during installation are stored in the registry. If the TC/Web installer is run on a system where TC/Web is already installed, previously existing registry values will be preserved. Furthermore, when the TC/Web application is started it will also write default values to the registry for any values that do not exist yet.



Picture 40: Registry Editor

The registry values will only be read by TC/Web once the web application is started. Therefore, if changes are made to the registry, TC/Web will only reflect these changes once it is restarted.

A simple way to restart TC/Web is to enter the command "iisreset" into a command prompt. This will restart IIS and all web applications on the server.

The TC/Web registry root key where most of the values are stored is:

```
"HKEY_LOCAL_MACHINE\SOFTWARE\Topcall\TCWeb\"
```

4.2 Additional Configuration

There are some TC/Web features which must be configured through XML files which are stored in C:\TCOSS\TCWEB\config\ directory. These configuration files will only be read by TC/Web once the web application is started. Therefore, if changes are made to the configuration, TC/Web will only reflect these changes once it is restarted. XML files can be changed with any XML Editor or even with notepad.

Note: Be sure that every XML configuration file contains correct XML tags and can be parsed by XML Parser.

XML file name	Description
access.xml	TC/WEB access configuration See: Securing TC/WEB – IP Access configuration Securing TC/WEB – User IP Blocking
filters.xml	Filters configuration See: Configuration - Configurable filter options Configuration – Predefined filters
rights.xml	User rights configuration. Usually you do not need to change this file.

4.3 Tool Configuration

Tools can be configured in the registry in a number of ways:

- Whether or not the tool is displayed by default
- How many entries are in the tools list
- Which columns are visible in the tool
- The order of the columns
- The width of the columns

Each tool has its own registry subkey under the TC/Web root key.

There are the subkeys Archive, DistList, History, Inbox, Outbox, OptFaxP, Private, Public, Recipient, Recipientpicker, System, User, Login/Logout Auditing.

List of tools with corresponding registry keys (The path to the following registry keys is HKLM\Software\TOPCALL\TCWEB\):

Tool	Registry key
Messages\Archive	Archive (Archive2, Archive3, Archive4)
Distribution Lists	DistList
Distribution list details tool	DistListDetail
History view for all message tools	History
Messages\Inbox	Inbox
Jobs\Problem Job Items	JobProblems
Jobs\Completed Jobs	JobTerminated
Jobs\Active Jobs	JobView
Job detail for Active Jobs tool	JobViewDetail
Messages\Outbox	Outbox
Messages\Private Folder	Private
Messages\Public Folder	Public
Recipients	Recipient
Recipient picker for Distribution list	Recipientpicker
Messages\System Folder	System
Users	User
Login/Logout Auditing	LoginLogoutAudit

In a TC/Broadcast system, the following tool subkeys also exist:

JobProblems, JobTerminated, JobView, JobViewDetail

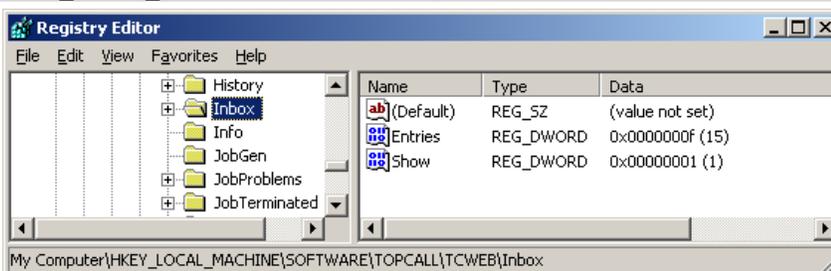
4.3.1 Tool Properties

The registry keys of a particular tool are stored under a subkey:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Topcall\TCWeb\[Tool name]
```

For example:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Topcall\TCWeb\Inbox
```



Picture 41: Registry Editor

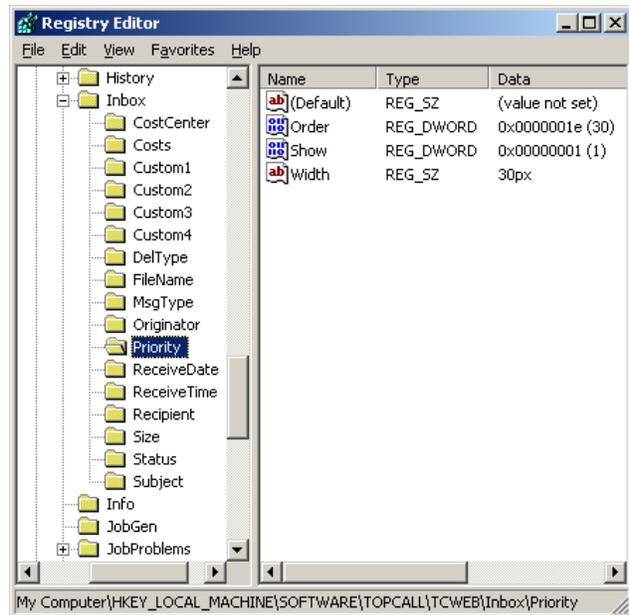
Key name	Description	Type	Default
Show	Determines whether a tool is available by default. 0... This tool is not available by default.	DWORD	[different for each]

	<p>1... This tool is available by default.</p> <p>Explanation of “by default”: This value works in combination with the configuration of the checkboxes in the TC/Web tab of the user’s profile. If a tool’s checkbox is checked, the tool will be available. If a tool’s checkbox is unchecked, the tool will not be available. If a tool’s checkbox is grey, the tools availability will be determined by this registry value.</p>		tool]
Entries	<p>For a tool with a list, this key specifies the number of entries to be displayed on each page. (Larger numbers of entries take longer to refresh the list)</p> <p>For the History View, it is the total number of entries available. For the History View, the default value is 100.</p>	DWORD	50 (min=10, max=100)

4.3.2 Tool Column Properties

Tools with lists can be configured in even more ways. The administrator can choose which columns are to be displayed, the order in which they will be displayed, and their width.

Each tool with a list has a registry subkey for each column. The columns are configured by editing the values in the column subkeys.



Picture 42: Columns for Inbox tool

Note: Some registry keys for columns can be created after the first TC/Web startup.

Example key:

HKEY_LOCAL_MACHINE\SOFTWARE\Topcall\TCweb\Inbox>Status

Values for a tool column:

Key name	Description	Type
Show	0 ... Column is not displayed. 1 ... Column is displayed.	DWORD
Order	Determines the order of the columns in the list. Columns are positioned from left to right, the higher the “Order” value, the further right the column.	DWORD
Width	Determines the width of the column in pixels or percentage. Values ending with “px” are interpreted as exact pixel widths, ie “50px”. Values ending with “%” are interpreted as percentage widths, ie “10%”	STRING

Note: It is recommended to keep gaps in the order between the fields (e.g. first field has the order number 10, second field has the order number 20). Thus, a later rearranging of the fields will be easier.

List of available columns of Inbox and Outbox in TCfW and TC/Web:

View	TCfW-English	TCfW-German	TC/Web-English	TC/Web-German	registry key
InBox	Status	Status	Status	Status	Inbox\Status\
InBox	Priority	Priorität	Message Type	Typ	Inbox\MsgType\
InBox	Priority	Priorität	Prior.	Priorität	Inbox\Priority\
InBox	...To Continued	...An fortgesetzt	Recipient	Empfänger	Inbox\Recipient\
InBox	cc/To:	An/Kopie:	Del	Art	Inbox\DelType\
InBox	Cost	Gebühren	Cost	Kosten	Inbox\Costs\
InBox	Cost Center	Kostenstelle	Cost Centre	Kostenstelle	Inbox\CostCenter\
InBox	Custom field 1	Kundenspez. Feld 1	Custom 1	Spezifisch 1	Inbox\Custom1\
InBox	Custom field 2	Kundenspez. Feld 2	Custom 2	Spezifisch 2	Inbox\Custom2\
InBox	Custom field 3	Kundenspez. Feld 3	Custom 3	Spezifisch 3	Inbox\Custom3\
InBox	Custom field 4	Kundenspez. Feld 4	Custom 4	Spezifisch 4	Inbox\Custom4\
InBox	File Name	Dateiname	Filename	Dateiname	Inbox\FileName\
InBox	File Size	Dateigröße	Size	Größe	Inbox\Size\
InBox	From:	Von:	From	Von	Inbox\Originator\
InBox	Normalized Address	Normalisierte Adresse	Normalized Address	Normalisierte Adresse	Inbox\NormalizedAddr\
InBox	Normalized Sender	Normalisierter Ersteller	Normalized Originator	Normalisierter Absender	Inbox\NormalizedOrig\
InBox	Pages	Seiten	Pages	Seiten	Inbox\Pages\
InBox	Received/Term.	Empfangen/Quittiert um	Date	Datum	Inbox\ReceiveDate\
InBox	Received/Term.	Empfangen/Quittiert um	Time	Zeit	Inbox\ReceiveTime\
InBox	Subject:	Betreff:	Subject	Betreff	Inbox\Subject\
InBox			Orig service	Absender Service	Inbox\OriginatorService\
InBox			Recip service	Empfänger Service	Inbox\RecipientService\
Outbox			Annotation		Outbox\Annotations
OutBox	Status	Status	Status	Status	OutBox \Status\
OutBox	Priority	Priorität	Message Type	Typ	OutBox \MsgType\
OutBox	Priority	Priorität	Prior.	Priorität	Outbox\Priority\
OutBox	...From Continued	...Von fortgesetzt	From	Von	Outbox\Originator\
OutBox	cc/To:	An/Kopie:	Del	Art	Outbox\DelType\
OutBox	Cost	Gebühren	Cost	Kosten	Outbox\Costs\
OutBox	Cost Center	Kostenstelle	Cost Centre	Kostenstelle	Outbox\CostCenter\
OutBox	Custom field 1	Kundenspez. Feld 1	Custom 1	Spezifisch 1	Outbox\Custom1\
OutBox	Custom field 2	Kundenspez. Feld 2	Custom 2	Spezifisch 2	Outbox\Custom2\
OutBox	Custom field 3	Kundenspez. Feld 3	Custom 3	Spezifisch 3	Outbox\Custom3\
OutBox	Custom field 4	Kundenspez. Feld 4	Custom 4	Spezifisch 4	Outbox\Custom4\

OutBox	Error	Fehler	Result	Resultat	Outbox\Error\
OutBox	File Name	Dateiname	Filename	Dateiname	Outbox\FileName\
OutBox	File Size	Dateigröße	Size	Größe	Outbox\Size\
OutBox	Normalized Address	Normalisierte Adresse	Normalized Address	Normalisierte Adresse	Inbox\NormalizedAddr\
OutBox	Normalized Sender	Normalisierter Ersteller	Normalized Originator	Normalisierter Absender	Inbox\NormalizedOrig\
OutBox	Pages	Seiten	Pages	Seiten	Outbox\Pages\
OutBox	Response	Antwort	Response	Antwort	Outbox\Response\
OutBox	Send Time	Sendezeit	Date	Datum	Outbox\SendDate\
OutBox	Send Time	Sendezeit	Time	Zeit	Outbox\SendTime\
OutBox	Subject:	Betreff:	Subject	Betreff	Outbox\Subject\
OutBox	To:	An:	Recipient	Empfänger	Outbox\Recipient\
OutBox			Orig service	Absender Service	OutBox \OriginatorService\
OutBox			Recip service	Empfänger Service	OutBox \RecipientService\
OutBox			Recip name	Name des Empfängers	Outbox\RecipientFullname\

List of available columns of Recipient and RecipientPicker in TC/Web:

View	TC/Web-English	TC/Web-German	registry key
Recipient	Recipient	Empfänger	Recipient\Recipient\
Recipient	Name	Name	Recipient\Fullname\
Recipient	Company	Firma	Recipient\Company\
Recipient	Service	Dienst	Recipient\Service\
Recipient	Number	Nummer	Recipient\Number\
Recipient	Lists	Listen	Recipient\Lists\
Recipientpicker	Recipient	Empfänger	Recipientpicker\Recipient\
Recipientpicker	Name	Name	Recipientpicker\Fullname\
Recipientpicker	Company	Firma	Recipientpicker\Company\
Recipientpicker	Service	Dienst	Recipientpicker\Service\
Recipientpicker	Number	Nummer	Recipientpicker\Number\
Recipientpicker	Lists	Listen	Recipientpicker\Lists\

4.4 TC/Web Registry Settings

This table lists all of the registry values in the root TC/Web key but also values that are specific for particular tool only and are therefore saved under the corresponding tool key (e.g. Compose).

The following sections in the manual discuss several of the configuration topics in more detail.

Note: After changing any registry key, it is necessary to restart IIS to make the changes effective.

The path to the following registry values is:

HKEY_LOCAL_MACHINE\SOFTWARE\Topcall\TCWeb

Key name	Description	Type	Default
AjaxRequestTimeout	The time period (in seconds) within which TC/Web must fetch data to display in grids, such as Inbox, Outbox. To avoid timeout, increase this value.	DWORD	60

Key name	Description	Type	Default
AppendTrace	0...clear trace file #0, write trace to that file. After an IISReset, the actual trace will be deleted 1 or more...append traces to file with count equal to AppendTrace minus 1	DWORD	0
ApplicationID	The TCSI's TS_APPL_ID to be set in the application session. This value is being used for Login/Logout auditing feature (see feature's description)	STRING	[blank]
AuditWorkstationNameMode	This displays the workstation information in the "WorkStation" of Login/Logout Auditing: ServerName... displays the server name, where TC/WEB is hosted DNSLookup... displays the workstation name from which the user login/logout to TC/Web IPAddress ... displays the IP address of the machine from which the user login/logout to TC/Web	STRING	ServerName
AuthorizeAdvancedMode	0...normal authorization 1...In this mode, any user (even with full sending/authorizing rights) must select an authorizer before sending the message. After sending, TC/Web automatically inserts the sending user as the first authorizer of the message, thus forcing the sender to look at their own message first. After the sender has authorized their own message, the message goes to the second authorizer.	DWORD	0
AuthorizeShowFinalRecipientInPreview	If an authorizer makes an image preview of a message with the cover sheet to be authorized, this key determines what is shown in the TO field of the cover sheet: 0 ... authorizer himself 1 ... the first of the list of intended recipients	DWORD	0
AuthorizeUnreadMessagesEnable	0...it is not possible to authorize unread messages; message must be open for inspection before authorizing 1...unread messages can be authorized	DWORD	1
AutoLogon	0... Autologon is not possible. 1... Users can log on automatically. (Users must have LAN Login right checked in user profile)	DWORD	0
AutoLogonUserWithDomain	0... Autologon only with user name 1... Autologon with domain and user name 2... Autologon with "user name@domain name"	DWORD	1
BrandApplicationName	Application name displayed on the login and logout screen and on the title bar of the web browser	STRING	Web Access
BrandCompanyName	Company name, displayed on the login and logout screen and on the title bar of the web browser	STRING	Kofax
BrandCompanyURL	URL to display when the user clicks on the logo image in the top left of the browser window. If blank, the logo image will not be a link. (Example: "http://www.kofax.com")	STRING	[blank]
BrandCustomUserField	Defines which field in the user profile holds the brand of this user. Permitted values: User id, group, location, representative, cost center, full name, company, department, free text	STRING	[blank]
BrandDirectory	The name of the directory where the brand files are stored. The Brand directory holds an image and CSS file to be used to customize the look of TC/Web. This value must contain a subdirectory name, not full path to brand directory. Ex.: value "brand_custom" is correct, but "C:\TCOSS\TCWEB\brand_custom" is incorrect.	STRING	brand
BrandPortalEnable	0... The normal login screen is displayed. 1... The portal files are displayed at login.	DWORD	0

Key name	Description	Type	Default
BrandUserExtensionsName	Optional alternative name for the User Extensions feature. If this field is blank, the string from the language file will be used: "User Extensions". (Example: "Phone Extension Configuration")	STRING	[blank]
Certificate-AutoUpdateUrl	URL from where the current version of the Tiffy viewer would be downloaded by TC/WEB in the case the certificate of the current version would expire	STRING	http://www.kofax.com/certificate/
CertificateExpirationWarningMessage	Defines to which users a Tiffy Viewer certificate expiration message will be shown: 0... Only to system administrators 1... To system and user administrators 2... To all users	DWORD	0
CertificateExpirationWarningMessageDate	Internal key used by TC/WEB to track TiffyViewer certificate expiration. Must not be changed manually	STRING	
Compose\RecipientServiceFilter	KCS service to be used for TO:, CC: and BCC: recipients (e.g. "FAX" for recipients with KCS service "FAX")	STRING	[blank]
Compose\AuthServiceFilter	KCS service to be used for the message authorizer (e.g. "TOPCALL" for authorizers with service "TOPCALL")	STRING	[blank]
CertificateExpirationWarningMessageText	Tiffy viewer certificate expiration message	STRING	[asked during installation]
ConfigAssistDisplayStringID	0... Text strings from the language file are displayed normally. 1... The ID of the text string is displayed in front of the text string itself.	DWORD	0
DateFormat	Date format %y – year %m – month %d – day	STRING	%y.%m.%d
DateFormatHint	Date format hint for calendar popup control	STRING	YY.MM.DD
DateTimeFormat	Date and time format for displaying dates %y – year %m – month %d – day %h - hour 01-24 %l - hour 01-12 %p – AM / PM %M – minutes For US format use: %y/%m/%d %l:%M %p For European format use: %d.%m.%y %h:%M	STRING	%y/%m/%d %h:%M
DateTimeFormatHint	Date with time format hint for calendar popup control	STRING	YY/MM/DD HH:MM AM/PM
DefaultLanguageFile	Path to TC/Web Access language file	STRING	tcWeb01.Ing
DefaultLanguageFileURLSend	Relative URL to language file for Send Applet	STRING	tcSendApplet01.Ing
DefaultLanguageFileURLViewer	Relative URL to language file for Java Viewer	STRING	tcJavaViewer01.Ing
DisableArchiveUserFilter	0... Enable Archive User filter 1... Disable Archive User filter	DWORD	0
DisableCorrect	0... Enable correct message functionality 1... Disable correct message functionality	DWORD	0
DisableReactivate	0... Enable Reactivate message functionality 1... Disable Reactivate message functionality	DWORD	0
DisplayAddressSelectorWithGrid	0... Address book tool (recipient selector) will be displayed without grids 1... Address book tool (recipient selector) will be displayed with grids	DWORD	0
DisplayComposeInFrame	0... Message composition tool in new window. 1... Open message composition tool in the main tool frame	DWORD	0

Key name	Description	Type	Default
DisplayComposeJob2Lists	Configures list picker in Send Job tool. 0... Show only one list box 1... Show two list boxes	DWORD	0
DisplayComposeWindowMaximize	0... Open standard-sized message composition window 1... Open message composition window at full screen size	DWORD	0
DisplayJavaURL	If Java is not installed on the user's browser, a link will be provided if the user attempts to view a message in the Java based image view.	STRING	www.java.com
DisplayMessagePreviewByDefault	Sets whether the preview is displayed for all message tools (Inbox, Outbox, etc.) 0... Preview not displayed by default 1... Preview displayed by default	DWORD	0
DisplayPriorityNumber	The value determines which users can see the Broadcast priority number in the outbox (indicating the Broadcast priorities High1-High10) 0... Never displayed 1... Only displayed to System User Administrators 2... Only displayed to Group User Administrators and System User Administrators 3... Displayed to all users	DWORD	1
DisplayProcessingRequestDelay	The value defines a timeout in seconds to display a 'Processing message' message. If page is not loaded within this timeout the message will be displayed.	DWORD	2
DisplaySendTipEmail	1... Display a tip on the New Message form explaining how to address an email 0... No tip	DWORD	0
DisplaySendTipFax	As above... 1... Display Fax tip 0... No tip	DWORD	0
DisplaySendTipSms	As above... 1... Display SMS tip 0... No tip	DWORD	0
DisplaySendTipVoice	As above... 1... Display Voice tip 0... No tip	DWORD	0
DisplayTipMaxUploadSizeK	The maximum allowed file upload size in kilobytes. This value must not exceed the maxRequestlength parameter in the TC/Web's web.config file (which is set to 32 MByte). If user attempts to attach a file larger than this registry key to a message, corresponding error will be displayed	DWORD	200
DisplayUserExtensionsServiceGroup	1... Display the specified Service and Group in the header of the User Extensions tool 0... Do not display	DWORD	1
DisplayUserSwitchedCompany	1... Display the Company of the user that is switched to. 0... Do not display the Company.	DWORD	0
DisplayUserSwitchedFullName	1... Display the Full Name of the user that is switched to. 0... Do not display the Full Name.	DWORD	0
DisplayVersion	1... Display link to version information in TCWEB header 0... Do not display	DWORD	1
DisplayVoiceScheduleEnd	Specifies the last hour to be displayed by default on the Voice Greeting Schedule. Possible values: 0 - 23	DWORD	20
DisplayVoiceScheduleStart	Specifies the first hour to be displayed by default on the Voice Greeting Schedule. Possible values: 0 - 23	DWORD	6
DL_FileFormat	File format to use when exporting Distribution Lists. 1... CSV format (comma delimited data) 2... TSV format (tab delimited data)	DWORD	1
DLEditDisplayPriority	Display priority dropdowns on the Distribution List Creation and Editing Tool? 0... Priority fields not displayed. 1... Priority fields are displayed.	DWORD	1

Key name	Description	Type	Default
DLEditDisplayTemporary	Display temporary/normal radio buttons on the Distribution List Creation and Editing Tool? 0... Temporary/normal radio buttons are not displayed. 1... Temporary/normal radio buttons are displayed.	DWORD	0
DLExportMinimumFields	Should only the minimum required fields be exported? 0... All fields are exported. 1... Only the minimum required fields are exported	DWORD	0
DLImportEnableModeCreateNew	Enable the "Create New" import mode on the Import Distribution List tool.	DWORD	0
DLImportEnableModeMergeAddresses	Enable the "Merge Addresses" import mode on the Import Distribution List tool.	DWORD	0
DLImportEnableModeUpdate	Enable the "Update" import mode on the Import Distribution List tool.	DWORD	1
DLNestedListsEnable	0... Do not allow lists to be nested in other lists. 1... Allow lists to be nested in other lists.	DWORD	0
EditEnable	If this key is set to 1, edit command in the list view's context menu is enabled. If set to 0, edit command is not visible (disabled).	DWORD	1
EnableAdminLogin	Enable administrative logins? 0... Disabled 1... Enabled	DWORD	1
ErrorCodeDescriptionUrl	URL to the error description file, e.g.: error.htm See chapter "Configuration - Long Text for Error Codes" for more details	STRING	[blank]
ExportConfig	Defines how the recipient addresses are handled during the distribution list export: 1 ... export recipient's first active address only 2 ... export recipient's all active addresses 3 ... export all recipient's addresses 4 ... export recipient's first active address, if it doesn't exist, the first address, if there is no address at all, export the recipient without addresses 5 ... export recipient without addresses	DWORD	1
ExtraArchiveFolders	Number of additional Archive folders, which are visible in TC/WEB (0..3)	DWORD	0
FaxAttachmentExtensions	List of extensions which can be used while sending to the FAX service	STRING	[blank]
FaxAttachmentImageFormatSend	Image format for fax attachments when sending (forwarding) incoming faxes 1 ... TIFF 7 ... PDF	DWORD	1
FaxAttachmentImageFormatView	Image format for fax attachments when viewing incoming faxes (open message function) 1 ... TIFF 7 ... PDF	DWORD	1
FaxAttachmentImageOptionsSend	Image format options for fax attachments in TIFF format when sending (forwarding) incoming faxes 0 ... Macintosh packbits 1 ... no compression 2 ... CCITT 3 ... fax G3 compression 4 ... fax G4 compression	DWORD	0
FaxAttachmentImageOptionsView	Image format options for fax attachments in TIFF format when viewing incoming faxes (open message function) 0 ... Macintosh packbits 1 ... no compression 2 ... CCITT 3 ... fax G3 compression 4 ... fax G4 compression	DWORD	0
FaxAttachmentServices	File extensions which are being sent to this service will be checked with FaxAttachmentExtensions	STRING	FAX

Key name	Description	Type	Default
FaxSeparateChar	A separator character which is used to separate recipient, service and number.	STRING	#
FaxService	The name of the service FAX.	STRING	FAX
ForwardAltContent	Forward additional message content? 0... Should not be forwarded. 1... Should be forwarded.	DWORD	0
ForwardLockingEnable	This value determines whether active message in the Inbox can be forwarded multiple times or not: 0... may be forwarded multiple times 1... may be forwarded only once	DWORD	0
ForwardTerminatedEnable	This value determines whether terminated message in the Inbox may be forwarded multiple times or not: 0... can't be forwarded anymore 1... can be forwarded	DWORD	1
FreeTextMultiline	Defines if multiline textbox is used while editing FreeText property of a user	DWORD	0
InboxDisplayOriginatorRecipientID	Display the RecipientID of the Originator in the Inbox list of data? 0... Do not display, trim the RecipientID off and show the Fullname as the first string 1... Display the RecipientID	DWORD	1
InboxFilterStatusDefault	Default filter in the Inbox on Status: 0... Show all messages 1... Show new and read messages 2... Show only new messages	DWORD	1
LanguageHtmlCharset	Sets character set attribute in HTML headers.	STRING	windows-1252
LanguageMailCharset	Sets the character set to use when posting a message from TC/Web	STRING	ISO-8859-1
LanguageTfcPCCodePage	Overrides the default TFC Windows CodePage attribute	STRING	[blank]
LoginPasswordOnlyNumbersAllowed	Enforces restrictions while setting a password for a new user or changing the password for an already existing user: 0... no restriction 1... only numeric passwords are allowed consisting of number digits 0-9	DWORD	0
MaxTraceFiles	Specifies the maximum number of trace files.	DWORD	2
MaxTraceFileSize	Specifies the maximum size of a single trace file.	DWORD	128
MessageExportEnable	Enable message export feature? 0... Export button is not displayed to user. 1... Export button is displayed.	DWORD	0
MessageExportFileFormat	The format to export the file in: 1... Export as comma separated values (.csv) 2... Export as tab separated values (.tsv)	DWORD	1
MessageExportTimeout	The maximum number of seconds to perform the export. Values from 0 to 120 are supported.	DWORD	30
MessageFormAddressbookNumEntries	The number of recipients that will be loaded into the "New Message" address book form at one time. If the user has more entries, they will be available via a "next" button. If this value is set to 0, all entries will be loaded.	DWORD	500 (min= 0, max = 10000)
MessageFormSendAsSwitchedUserDefault	Sets which user ID will be selected by default in the "Send as User" select box. 0... The user ID of the administrative user 1... The user ID of the switched user	DWORD	0

Key name	Description	Type	Default
MessageFormSendAsSwitchedUserEnable	The value determines for which users a "Send as User" select box will be drawn on the send form, allowing the user to choose from whose user account the message is sent. 0... Never displayed 1... Only displayed to system user administrators 2... Displayed to both group user administrators and system user administrators	DWORD	1
MessageFormSendWhileSwitched	Sets whether an administrative user can send a job or message while switched to another user. 0... No user can send while switched. 1... Only system user administrators can send while switched. 2... Group user administrators and system user administrators can both send while switched.	DWORD	1
MessageForwardNoBody	Defines if the body of the original message will be copied to forwarded message 0... Body is copied 1... Body is not copied	DWORD	0
MessageForwardNoHeader	Defines if the body of the original message header will be copied to forwarded message 0... Message header is copied 1... Message header is not copied	DWORD	0
MessageForwardNoSubject	Defines if the subject of the original message will be copied to the subject of a forwarded message 0... Subject is copied 1... Subject is not copied	DWORD	0
MessageFromTemplateEnable	Defines if it is possible to create a new message from template 0... Creation of a new message from template is disabled. 1... Creation of a new message from template is enabled.	DWORD	0
MessageImageInTextView	Defines if image viewer is also visible in Text View 0... Images are not displayed 1... Image viewer is displayed in Text View	DWORD	0
MessageHeaderInImageView	Defines if message header is displayed in Image View 0... MessageHeader is not displayed in Image View 1... MessageHeader is displayed in Image View	DWORD	0
MetamailClient (TC/Metamail)	Set to 1 when TC/Web is to be used as a metamail client.	DWORD	0
MetamailHideButtons	1 ... The buttons in header of metamail windows are not displayed. 0 ... Buttons are displayed.	DWORD	0
MetamailLatestDelTime (TC/Metamail)	If metamail is configured to "SearchInOutBox" in TCAt2Url, this registry value can be used to define the time range in which the metamail message is searched.	DWORD	0
MetamailSuperuserHideActionButtons	If set to 1, and a user is logged in as Superuser for metamail, the Reply, Reply All and Forward buttons will not be available in the metamail message header.	DWORD	1
OcrCoverDelay (TC/Broadcast)	Delay measured in seconds you expect from the computer where "TCMFFormsGen" is running to create the PDF – file of your FAX OCR Cover Sheets.	DWORD	120 (min=10, max=240)
OcrCoverRequestDir (TC/Broadcast)	Directory or network share of the "TCMFFormsGen" - computer where the IIS should send its requests.	STRING	[blank]
OcrCoverResponseDir (TC/Broadcast)	Directory or network share of the "TCMFFormsGen" - computer where the IIS expects the generated PDF – files.	STRING	[blank]
OcrPDFCopyTime (TC/Broadcast)	Delay measured in seconds for a file transfer of the PDF – files from the "TCMFFormsGen" – computer to the download directory of the IIS – computer.	DWORD	4 (min = 1, max=20)
OneDocEnabled	Defines availability of online help. 0 ... not visible to users 1 ... visible to users	DWORD	1

Key name	Description	Type	Default
OptAddresses\ShowAdmin	Defines which user administrators can access another user's Addresses tool 0... No admin access to tool 1... System administrator access to tool 2... Group administrator and system administrator access to tool	DWORD	1
OptEvent\AddNew	Visibility of Add Event button 0... No users 1... Only system administrators 2... Group administrators and system administrators 3... All users	DWORD	3
OptEvent\Delete	Visibility of Delete Event button 0... No users 1... Only system administrators. 2... Group administrators and system administrators 3... All users	DWORD	3
OptOptIdentity\Show	Visibility of Identity button 0... Users cannot see it. 1... Users can see it.	DWORD	1
OptEvent\ShowAdmin	Sets the type of user administrators who can access another users' Events tool 0... No admin access to tool 1... System administrator access to tool 2... Group administrator and system administrator access to tool	DWORD	1
OptEvent\ShowNonInEvent	Defines which event types users can access 0... Only In Events are accessible for all users. 1... System users can see all event types. 2... Group and system users can access all event types. 3... All users can access all event types.	DWORD	1
PageSizeDropDownEnable	Display a dropdown box at the top of every list to set the number of items to display per page. 0... Dropdown is not displayed to user. 1... Dropdown is displayed to user.	DWORD	1
PageSizeDropDownValues	This comma delimited list holds the values that will be available to the user in the dropdown box. Values of 0, non-integer values, and text values will be ignored. Values under 100 recommended.	STRING	10,15,25,50
RecipientHideAnswerback	If the key is set to 1, the answerback field of every address will not be displayed; the user will not be able to edit the answerback field either.	DWORD	0 (min=0, max=1)
RecipientHideCompany	If the key is set to 1, the company field of the recipient will not be displayed.	DWORD	0 (min=0, max=1)
RecipientHideDelete	If the key is set to 1, the "Delete Address" button will not be displayed at the end of each address.	DWORD	0 (min=0, max=1)
RecipientHideDepartment	If the key is set to 1, the department field of the recipient will not be displayed.	DWORD	0 (min=0, max=1)
RecipientHideFreeText	If the key is set to 1, the free text field of the recipient will not be displayed.		0 (min=0, max=1)
RecipientHideNewAddress	If the key is set to 1, the New Address button will not be displayed in the recipient editing form.	DWORD	0 (min=0, max=1)
RecipientHideSalutation	If the key is set to 1, the salutation field of the recipient will not be displayed.	DWORD	0 (min=0, max=1)
RecipientsLimit	When opening a message, if the number of recipients exceeds the value set by RecipientsLimit, only the active recipient will be displayed, otherwise, all recipients will be displayed. If RecipientsLimit is set to 0, all recipients will always be displayed.	DWORD	1000 (min= 0, max = 10000)

Key name	Description	Type	Default
ReplyEnable	If this value is set to 1, reply and reply all buttons in the message windows and in the list view's context menu are enabled. If set to 0, neither reply nor reply all buttons are visible (they are disabled).	DWORD	1
SaveFilterSettings	Default value for a user's Options > Settings > Save Filter Settings. This registry value will be used for all new users; existing users' values will not be changed. 0... Never save filter settings. 1... Save filter settings during the current session. 2... Remember filter settings even after the user logs out and back in again.	DWORD	0 (min=0,max=2)
SaveLastUserTime	Time after which the last user is not automatically shown any more in the login window. (in days)	DWORD	30 (min=0, max=365)
SearchTimeOut	Defines timeout for opening folders in TC/Web. For TC/SS with a large amount of data it could take more time to open a folder.	DWORD	60
SecurityCSRFPreventionEnable	It ensures security against CSRF attacks: 1... ensures security against CSRF attacks 0... disabling CSRF security	DWORD	1
SecurityXSSPreventionEnable	It ensures security against XSS attacks: 1... ensures security against XSS attacks 0... disabling XSS security	DWORD	1
SendAddCompanyToFullName	Add company field (if specified) in parentheses to the fullname field when sending messages and recipient is added using advanced address grid? 0.. Do not add company field to fullname 1.. Add company field to fullname	DWORD	1
SendAddressesMax	Configures a maximum number of recipients which can be used for sending a message	DWORD	500
SendAsUserEnable	Configures a possibility for administrative users to send messages from other users 0... Sending from other users is disabled. 1... It is possible to send a message from other users.	DWORD	0
SendBroadcastPin	Include PIN data in sent jobs and display the information in the User Identity tool? 0... No. 1... Yes.	DWORD	0
SendConfXXXXX	See feature <i>Confirmation of Sent Messages</i> .		
SendFormUploadAllowedCharsInAttName	Characters which are used in regular expression are only valid for the filenames, when a file is attached. By default it allows following characters: Lower and capital letters a, ...z and A,...Z Numbers : 0-9 Symbol currency : \$, £ .. Symbols like : + _ . - ~	STRING	^[\\w\\p{L}\\p{Sc}]\\-\\.+~]+\$
SendFormUploadRequireExtensions	Requires an attachment uploaded to a message or job to have a file extension. 0... Attachments without extension allowed. 1... Attachments without extension not allowed.	DWORD	0
SendFormUploadAttachmentWhiteList	This key requires the extensions of files in the format extension1;extension2; ... Example: pdf; gif; etc.. which means only these file extensions are only uploaded by TCWEB Default value is "*" which means all file extensions are accepted for uploading the attachments. If SendFormUploadAttachmentWhiteList is empty, then attachments cannot be uploaded.	STRING	*

Key name	Description	Type	Default
SendInBatchActive	Configures if sending in batch is activated while sending a message. Each message will contain as many recipients as configured with SendInBatchAddressesPerBatch registry key.	DWORD	0
SendShowErrorInStatus Line	In outbox, when a message has a "Problems" status and if it is opened, it displays the last error message as tooltip in the status line. Default value is 0. If set to 1, the last error message is shown in the status line	DWORD	0
SendInBatchAddressesPer Batch	Configures a number of recipients used pro batch when sending in batch is activated	DWORD	0
ServerCookieName	Cookie name for HW load balancer	STRING	[blank]
ServerCookieValue	Cookie value for HW load balancer	STRING	[blank]
ServerID	ID of the KCS Server (Example: "TCsvr")	STRING	[blank]
ServerIDArchive	ID of the KCS Archive Server (Example: "TCarchive")	STRING	[blank]
ServerIdVoice	ID of the Voice Server. Multiple IDs can be entered, delimited by ;. (Example: "TCvoiceA;TCvoiceB")	STRING	[blank]
ServerPath	Path to the KCS Server (Example: "TCP/IP,TCOSS01")	STRING	[blank]
ServerPathArchive	Path to the KCS Archive Server (Example: "TCP/IP,TCARCH01")	STRING	[blank]
ServerResourcesVoice	Resources to use on the voice server. Multiple entries can be entered, delimited by a \$. (Example "telephone1\$telephone2")	STRING	telephone
SmtptSendMailTimeout	Timeout in seconds when mail is sent over SMTP. Default is 180 seconds.	DWORD	180
SmtptSeparateChar	Character for separating Service SMTP from number	STRING	#
SmtptService	Name of the service SMTP	STRING	SMTP
SuperInternal	Password of user specified in key "SuperUser"	STRING	[blank]
SuperInternalVoice	Password of a user to be used to access the TCVMail user profile for Voice Configuration	STRING	[blank]
SuperUser	User name of user on KCS system which will be used for Metamail. See "TC/Metamail Registry Keys" chapter	STRING	[blank]
SuperUserVoice	ID of a user to be used to access the TCVMail user profile for Voice configuration	STRING	[blank]
TCDISTMFImportsPath	File path for importing distribution lists through tcdistmf2.exe process. The DL file being imported is copied by TC/WEB to this directory and tcdistmf2.exe imports it into the tcoss.	STRING	C:\TCOSS\TCWeb\Imports\
TcService	Name of the TOPCALL service	STRING	TOPCALL
TemporaryFolderPath	All the temporary files which are created by downloads/uploads are being stored here by creating the session Id folder inside , followed by Uploads and Downloads folders internally.	STRING	C:\TCOSS\TCWEB\TMP\
TerminateWhenOpen	Status change when message opened in new window: 0... No status change 1... Set status to read 2... Terminate message	DWORD	1
TerminateWhenPreview	Status change when message opened in preview: 0... No status change 1... Set status to read 2... Terminate message	DWORD	1
TimeoutSession	Default time of inactivity after which the user must re-login (minutes)	DWORD	10 (min=5, max=1440)
TimeoutSessionMaximum	Upper limit of the session timeout value for all users (minutes)	DWORD	30 (min=5, max=1440)

Key name	Description	Type	Default
TimeoutSessionMetamail	Default time of inactivity after which the user must re-login after opening a Metamail message (minutes)	DWORD	5 (min=1, max=1440)
TraceFile	Fully qualified path to trace file or path relative to <RootDir>\Trace. E.g.: c:\temp\tcweb.trc	STRING	<RootDir>\Trace\ <ProcessName> <number>.trc
TraceLevel	TC/WEB trace level. Possible values are: 0x80 - Use for steps within a function or code 0x40 - Use for all function definitions and at the top of the page 0x20 - Use for important steps 0x10 - Use for non-critical errors 0x0 - Use for critical errors - always traced	DWORD	0x10
TraceToScreen	Enables (1) or disables (0) output of trace info to screen.	DWORD	1
TraceToFile	Enables (1) or disables (0) output of trace info to files.	DWORD	1
TrustedIPList	Comma separated list of IP addresses from which administrative logins are enabled; if empty, all IPs will be enabled.	STRING	[blank]
UploadPath	Temporary path where TC/WEB stored uploaded attachments	STRING	C:\TCOSS\TCWEB \UPLOADS
UseWellKnownServer	When a connection is established to the voice server, should a Voice ServerID be passed? 0... Do not pass the value stored in "ServerIDVoice" 1... Pass the value stored in "ServerIDVoice"	DWORD	1
UserRightsConfig	Internal key used by TC/WEB. Please do not change it	STRING	C:\TCOSS\TCWEB \config\rights.xml
VoiceDisconnectPollPeriod	Defines how often voicemail player in the message window should poll the server to detect if the user has hung up – so that it can disconnect from the voice server. (seconds)	DWORD	60 (min=15, max=240)
VoiceSystemUser	User ID of the user where the System Voice Greetings are stored	STRING	TCVMail
VoiceRecordTMOIdle	Maximum allowed silence time prior to stopping the recording of the voice message in seconds, by default this registry value is not created and it is set to 10 seconds	STRING	TCVMail
VoiceRecordTMOLength	Maximum recording time of as voice message in seconds, by default this registry value is not created and it is set to 120 seconds	STRING	TCVMail
WebDomainName	Domain name of the computer running the TLinkSM/OC (Example: "kofax.com")	STRING	[blank]
WebHostName	Host name and port number of the computer running the TLinkSM/OC (Example: "linksm.kofax.com:25"). In order to make message sending fault tolerant, it is possible to specify more than one LINK-SM server. Host names must be separated by the "]" character. The number of host names is unlimited and they will be used in the same order they are listed. Note: By default port 25 is used. Valid port range is from 1 to 65535. If used port is outside the range default port will be used.	STRING	[blank]

In order to activate the AutoTimeZone feature, it is necessary to create following registry value and set it to value "1":

Key name	Description	Type	Default
HKEY_LOCAL_MACHINE\Software\TOPCALL\TCWeb\TCS\AutoTimeZone	AutoTimeZone 0... Disabled 1... Enabled	DWORD	0

4.4.1 Obsolete Registry Values

This section lists registry values that can be sometimes found in the registry (particularly for older installations of TC/Web) but are no longer used by TC/Web.

- DisplayComposeWindowAddressServiceFAX
- DisplayComposeWindowAddressServiceSMTP
- DisplayComposeWindowAddressServiceTOPCALL
- DisplayComposeWindowAddressServiceVOICE
- DisplayComposeWindowAddressStyle
- EuropeanDateFormat
- SessionTimeoutDefault
- SessionTimeoutMaximum

4.5 Branding: Customizing the Look and Feel

TC/Web can be branded to match an existing corporate identity. This is achieved through a combination of files and registry keys.

4.5.1 Files

The default KCS brand files are installed in the TC/Web installation directory by the TC/Web setup in the “brand” directory, normally “C:\TCOSS\TCWEB\brand\directory”. The two files are:

- brandLogoHeader.jpg – The logo that is displayed in the top left corner of TC/Web. The image dimensions are width=190 and height=45 pixels.
- Brand_Style.css – This is a standard Cascading Style Sheet file used to specify how HTML pages are displayed. This file determines all of the colors in TC/Web as well as the font styles and sizes. CSS files can be edited by an HTML or web programmer.

To configure brand files for TC/Web, a new directory should be created in the TC/Web install directory with a name such as “brand_custom”. Customized versions of the brand files should be placed in this new directory. The registry will then be used to instruct TC/Web to look into the new brand directory.

Note: The files in the standard brand directory are overwritten by the TC/Web installer, therefore it is recommended to create the new brand directory as described.

If there is a problem with Brand_Values.xml file (it does not exist or cannot be loaded), the brand values (application name, company name, company URL) from registry variables BrandCompanyName, BrandApplicationName, BrandCompanyURL will be used.

4.5.2 Registry Keys:

- BrandDirectory – The name of the directory where the brand files are stored. Change this value to the name of the new brand directory to activate the new brand files. The name must contain a directory name, not full path to the brand directory. Ex.: value “brand_custom” is correct, but “C:\TCOSS\TCWEB\brand_custom” is incorrect.
- BrandCompanyName – The name of the company, displayed on the login and logout screen and on the title bar of the web browser.
- BrandApplicationName – A customized name for TC/Web, displayed on the login and logout screen and on the title bar of the web browser.
- BrandCompanyURL – The URL to be displayed if the user clicks on the logo image in the top left of the browser window.

See section “TC/Web Registry Settings” for details.

4.6 Per User GUI Branding

The branding functionality of TC/Web has been enhanced to support multiple brands (or look and feel) on one TC/Web instance. A brand can be mapped to a user through a field in a user’s profile.

Each brand consists of three files stored in a directory:

- brandLogoHeader.jpg – The logo to display in the upper left hand corner of the browser window. The image should have the dimensions of 190 x 36 pixels.
- Brand_Style.css – The style sheet holding any customized style information.
- Brand_Values.xml – Contains text values for:
 - name of the application
 - name of the company
 - website URL of the company

The three files hold all data for the brand. No brand information will be stored in the registry. The name of the directory is the name of the brand. All brand directories will be stored in the new subdirectory: TCWEB\brand_custom. The default brand for TC/Web will still be stored in the TCWEB\Brand directory.

For example, on a standard system where TC/Web is installed at C:\TCOSS\TCWEB the directory path for a brand called “aLook” is C:\TCOSS\TCWEB\brand\aLook.

There are no KCS supplied tools to edit or create these files. They are internet standard files that can be edited with standard text editors, html tools, and graphics tools.

4.6.1 Brand Selection

The multiple brand functionality will only be enabled if the registry value “TCWEB\BrandCustomUserField” is not empty. This value determines which brand should be used for each user. The registry value contains the name of the field in the user profile holding the brand of the user. For example, if the registry value holds “group”, then TC/Web will look for a directory with the name of the user group in the TCWEB\brand_custom directory that holds the brand information.

If the brand directory does not exist, or if the “BrandCustomUserField” is empty, the directory specified in the registry value “TCWEB\BrandDirectory” will be used. Note that the directory specified in BrandDirectory must be located in the C:\TCOSS\TCWEB directory, not the C:\TCOSS\TCWEB\brand_custom directory.

If the “TCWEB\BrandDirectory” registry key is also empty, the default KCS brand stored in the C:\TCOSS\TCWEB\brand directory will be used.

4.6.2 Login Screen

The selection of the brand in a multiple brand environment depends on the user. At the login screen, the user has not yet logged in and so the system does not know which user is visiting. Therefore, whenever a user logs in a browser cookie is written to their browser storing which brand was loaded. This cookie is read at the login screen and used to choose the brand.

It is also possible to specify the brand to load at the login screen via a querystring parameter in the URL. This would be useful for first time visitors who do not yet have a cookie set. The parameter name is “brand”. For example, the URL <http://www.domainname.com/tcweb/login.aspx?brand=mystyle> would load the brand “mystyle”.

4.6.3 Notes

The Brand_Style.css does not need to specify every style. TC/Web also uses a default style sheet stored in C:\TCOSS\TCWEB\brand. The style sheet in the custom brand directory only needs to define the styles differing from the default style.

Value Name	Description and Allowable Values	Type	Default
BrandCustomUserField	Defines which field in the user profile holds the brand of this user; allowable values: User id group location representative cost center full name company department free text	STRING	[blank]

BrandDirectory	Holds the name of the directory in the TCWEB root with the brand information to use when Multiple Brands are not being used, or when a brand read from a user profile does not exist	STRING	"brand"
----------------	--	--------	---------

4.6.4 Example Scenario

A KCS system is installed on a service provider having many different companies as customers. The service provider offers KCS as a service with TC/Web as the user interface. Each company wants TC/Web to appear in the web browser as if it were a part of their own intranet. Therefore they would like to have their own logo appear in the browser.

The service provider has decided to create a unique group for each company. Each user belonging to a particular company is assigned to that group.

The service provider administrator therefore sets the "TCWEB\BrandCustomUserField" registry key to the value "group". Once the registry value has been changed, the IIS server must be restarted for the changes to take effect in TC/Web.

The service provider has just signed on a new customer "aLook". The administrator creates several new users, all with the group field set to "aLook".

To create the brand itself, the administrator copies the existing directory

```
C:\TCOSS\TCWEB\brand_custom\example
```

to

```
C:\TCOSS\TCWEB\brand_custom\aLook
```

The aLook directory will hold all of the files for the brand.

The administrator has requested a JPG image of the companies' logo with the correct dimensions from the company. He/she names the file brandLogoHeader.jpg and copies it into the aLook directory, overwriting the existing file.

He/she edits the values in the Brand_Values.xml file to match the name and URL of the aLook company.

With the assistance of a web programmer, and consulting the default brand file stored in C:\TCOSS\TCWEB\brand\Brand_Style.css, the administrator adds the following lines to the Brand_Style.css file in order to set the color of the top horizontal line and the color of the background of the navigation area in TC/Web

- td.headerLine1{background-color:#0000FF; }
- td.headerLine2{background-color:#0000FF; }
- table.mainMenuBorder{background-color:#0000FF; }
- table.mainMenu{background-color : #DDDDFF;}

As soon as the directory is created in the brand_custom directory, the brand will be active, no IIS restart is necessary.

Now that the brand is created and the registry value is set, any user logging in and belonging to the group "aLook" will see the new logo, text and colors of the aLook brand. The name of the brand has been stored in a browser cookie, so that whenever the user visits the login screen of TC/Web again, the saved brand will also be applied there.

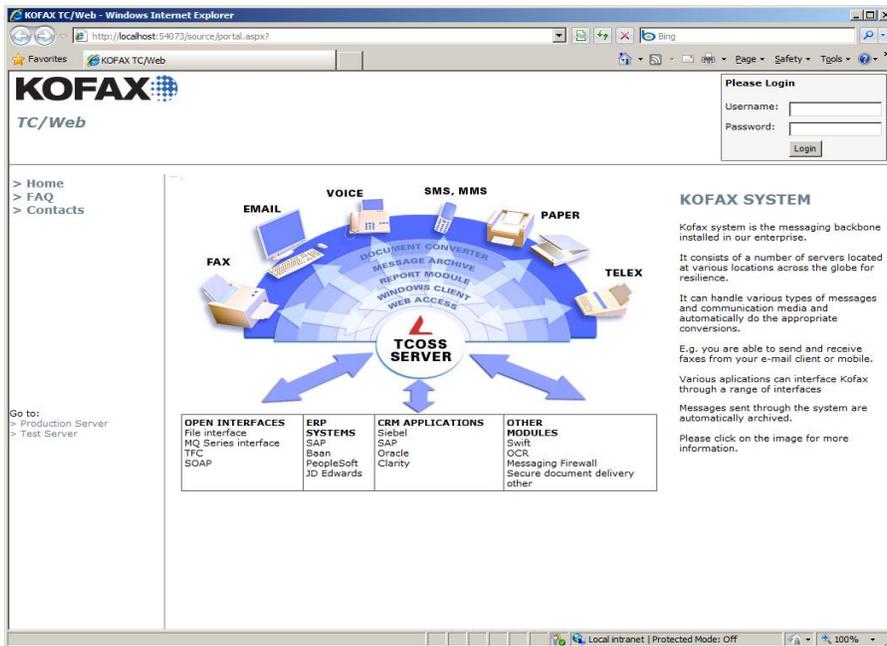
But what if a new user visits the login screen? He/she has not logged in yet so the system does not know his/her group. How can the proper brand be displayed in this case?

To ensure that a first-time user sees the correct brand, a special URL for TC/Web can be used including the brand in the querystring. This URL can be sent to the user in an email, or the URL can be used as a link on another webpage, such as the corporate intranet.

Here is the format to specify the brand: <http://www.serviceproviderserver.com/tcweb/login.aspx?brand=aLook>

4.7 TC/Web as Portal

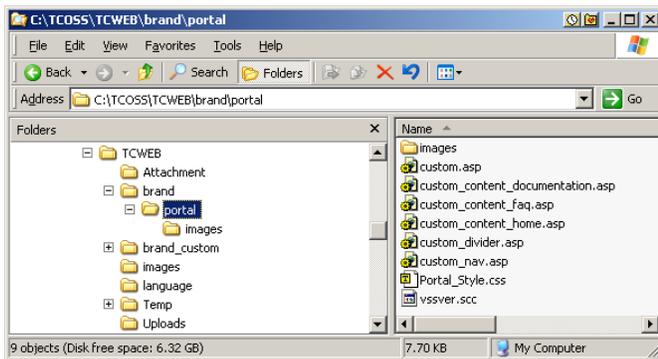
It is possible to configure TC/Web so that the login screen contains customizable HTML content rather than just a login window. This HTML can be edited by the customers in order to present relevant information to their users.



Picture 43: Default portal

The default portal files show an image representing the KCS functionality. However, this is just a frame and must be customized before actually being used.

The portal files are stored in the brand directory:



Picture 44: Brand directory, where portal files are stored

These files can be edited freely to create a portal tailored to a particular installation. The first file that is called is the “custom.aspx” file. This file calls all of the other files.

The Portal concept supports the “Branding” and “Per user branding concept”.

The simplest way to use branding is to create a new directory in the TC/Web directory

(i.e. “TCWEB\brand_mycompany”) and copy all of the contents of the “TCWEB\brand” to the new directory. Then set the registry key BrandDirectory to the name of the new directory. The contents of this new directory can now be customized.

Note: The sample portal files included in the TCWEB\brand\portal directory will be overwritten every time a new version of TC/Web is installed. Therefore one of the branding concepts should be used with the portal concept. Then the files will be stored in another location and will not be overwritten with new versions of TC/Web.

Value Name	Description and Allowable Values	Type	Default
BrandPortalEnable	0... The normal login screen is displayed. 1... The portal files are displayed at login.	DWORD	0

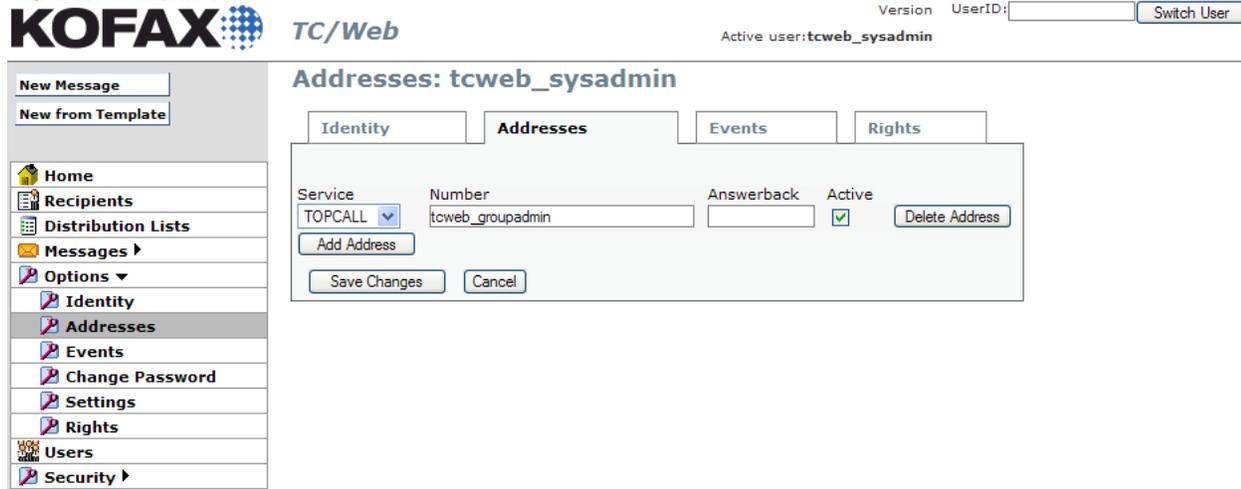
4.8 User Addresses and Events Editors

These two features are available to an end user under the Options menu.

Whether the “Addresses” and “Events” menu options are visible in the menu for a particular user is configured with a combination of registry keys and user profile settings in the same way as all of the other items in the menu.

When a user clicks on the Identity, Addresses, or Events menu option, the tool will be displayed. However, these three tools are now linked in a tab system. Clicking on the tabs for the other tools will display the same results as clicking on the menu options in the left navigation menu. If one of the tools is not available, it will not be displayed in the left navigation menu or in the tabs.

Note that for information to be saved, the user must click on the “Save...” button. Data entered in one form will not be remembered if a user only enters the information and clicks on another tab.



Picture 45: TC/Web Addresses Tab

Administration

For user administrators, these tools can be used while switching to another user. They will then be used in the same manner as a normal user would access them.

The three tools are also available to administrators who have access to the Users tool. If a user entry is clicked on in the Users tool, the user’s Identity tool will be opened. However, the Addresses and Events tools are now available to the administrator via the tabs in the Identity tool.

Whether an administrator can access these tabs while administering a user is determined by two registry keys.

All keys can be found in the HKEY_LOCAL_MACHINE\SOFTWARE\TOPCALL\TCWEB\ key:

Value Name	Description and Allowable Values	Type	Default
OptAddresses\ShowAdmin	0... no admin access to tool 1... System administrator has access to tool. 2... Group administrator and System administrator have access to tool.	DWORD	“”
OptEvent\ShowAdmin	0... no admin access to tool 1... System administrator has access to tool. 2... Group administrator and System administrator have access to tool.	DWORD	“”

Identity: tqadmin

The Identity tab for user 'tqadmin' contains the following fields and options:

- User ID: tqadmin
- Group: tqadmin
- Representative: tqadmin
- Full name: [Empty field]
- Salutation: [Empty field]
- Company: [Empty field]
- Department: [Empty field]
- Free text: [Empty field]
- Cost center: [Empty field]
- Location: [Empty field]
- Language: English (dropdown)
- Session timeout: 10 (30 Minute maximum)
- Default template: [set] [clear]
- Change own password:
- Password never expires:
- Change password at next login:
- Number locking:
- Buttons: Save Changes, Cancel

Picture 46: TC/Web Identity tab

Address Tool

The Addresses tool is used to create, edit, and delete the addresses of a user. Several registry keys that apply to the Recipients tool also apply to the Addresses tool.

- TCWEB\RecipientHideAnswerback
- TCWEB\RecipientHideDelete
- TCWEB\RecipientHideNewAddress

This tool allows users to edit their own addresses.

To edit the addresses of another user during a user switch, the administrator must have either the Group User Profiles – Write right or the System User Profiles – Write right. These rights can be set using TCWEB or the TCfW application.

The Addresses tool for user 'tqadmin' displays the following table:

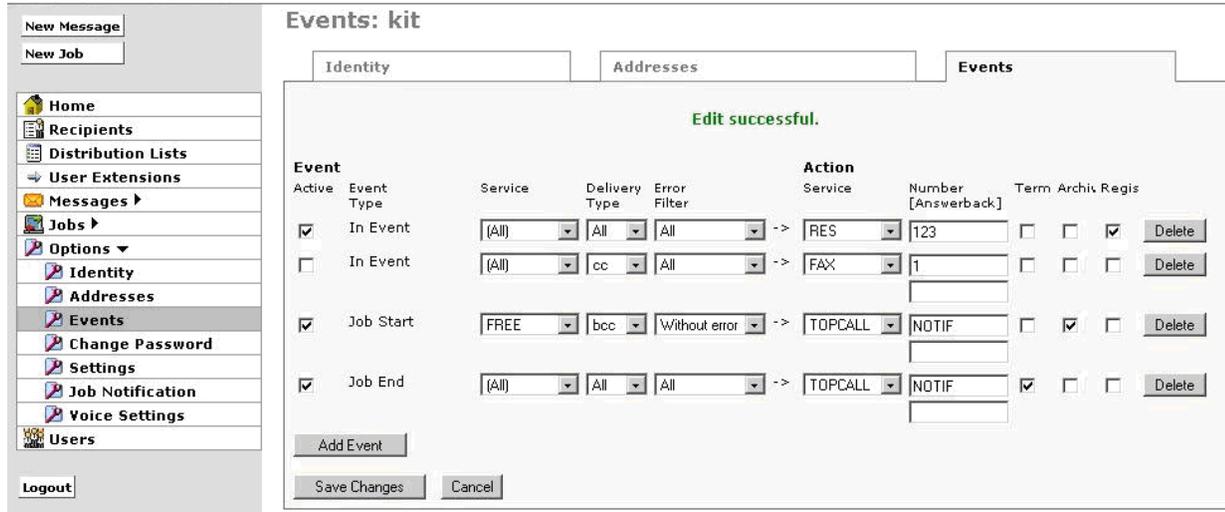
Service	Number	Answerback	Active
TOPCALL	tqadmin	[Empty]	<input checked="" type="checkbox"/>
TCFI	tqadmin	[Empty]	<input type="checkbox"/>

Buttons: Add Address, Save Changes, Cancel, Delete Address (for each row)

Picture 47: TC/Web Addresses tab

Events Tool

The Events tool is used to create, edit, and delete the events of a user.



Picture 48: TC/Web Events tab

Configuring Visibility

The fields and actions which will be available in this tool are visible to end users; administrative users can be configured via the registry. If a user edits an existing event, non-visible data will be preserved and cannot be edited.

A separate registry value exists for each item that can be configured. The values can be configured in the following way:

- 0 item is not visible to any user
- 1 item is visible only to system administrators
- 2 item is visible only to system administrators and group administrators
- 3 item is visible to all users

The following items can be configured:

Columns: Active, Eventtype, Service Event, DeliveryType, ErrorFilter, RecipientNumber, Service Action, Number, Termination, Archive, Registry

All keys can be found in the HKEY_LOCAL_MACHINE\SOFTWARE\TOPCALL\TCWEB\OptEvent\ key in the registry.

Value Name	Description and Allowed Values	Type	Default
Active\ShowAdmin	visibility of Active column: 0,1,2,3	DWORD	3
Archive\ShowAdmin	visibility of Archive column: 0,1,2,3	DWORD	1
AutoTerminate\ShowAdmin	visibility of Terminate column: 0,1,2,3	DWORD	1
DeliveryType\ShowAdmin	visibility of Delivery Type column: 0,1,2,3	DWORD	1
ErrorFilter\ShowAdmin	visibility of Error Filter column: 0,1,2,3	DWORD	1
EventType\ShowAdmin	visibility of Event Type column: 0,1,2,3	DWORD	1
Number\ShowAdmin	visibility of Number column in the Action region: 0,1,2,3	DWORD	3
RecipientNumber\ShowAdmin	visibility of Recipient Number column: 0,1,2,3	DWORD	1
Registered\ShowAdmin	visibility of Registered column: 0,1,2,3	DWORD	1
ServiceAction\ShowAdmin	visibility of Service column in the Action region: 0,1,2,3	DWORD	3
ServiceEvent\ShowAdmin	visibility of Service column in the Event region: 0,1,2,3	DWORD	3

All keys can be found in the HKEY_LOCAL_MACHINE\SOFTWARE\TOPCALL\TCWEB\OptEvent key in the registry.

Value Name	Description and Allowed Values	Type	Default
AddNew	visibility of Add Event button: 0,1,2,3	DWORD	3
Delete	visibility of Delete button for each event: 0,1,2,3	DWORD	3

Configuring Defaults

Whenever a user creates a new event, default values are inserted for all fields. Default values are stored in registry keys. The default values are applied for each field, whether it is visible or not. The default values are particularly important for the fields that are hidden from the user as they cannot be edited by the user.

All keys can be found in the HKEY_LOCAL_MACHINE\SOFTWARE\TOPCALL\TCWEB\OptEvent key in the registry.

Value Name	Description and Allowed Values	Type	Default
Active\Default	0... inactive 1... active	DWORD	1
Archive\Default	0... do not archive 1... archive	DWORD	0
AutoTerminate\Default	0... do not auto terminate 1... auto terminate	DWORD	0
DeliveryType\Default	0... all 1... to 2... cc 3... bcc 4... Auth	DWORD	1
ErrorFilter\Default	"-1"... all " "... without error "*"... with error Any other two character code can be used.	STRING	"-1"
EventType\Default	1... In Event 2... MsgWaitOn 3... MsgWaitOff 4... DelNotif 5... NonDelNotif 6... Sending Copy 7... Job Start 8... Job End	DWORD	1
Number\Default	the number to be entered	STRING	""
RecipientNumber\Default	255 ... All 1 ... first	DWORD	1
Registered\Default	0... do not register. 1... register	DWORD	0
ServiceAction\Default	The text string of the service to use. Use "0" to default to the first service on the KCS system.	STRING	"0"
ServiceEvent\Default	The text string of the service to use. Use "0" for "(All)".	STRING	"0"

Limiting Access to In Events

There are several different kinds of events but in many cases, only the events of the type "In Event" are useful to a user. The system can be configured so that only events of the type "In Event" will be available to the user.

If configured, only the "In Event" events will be displayed in the Event tool. Also, if the user creates a new event, it will be of this type. The type of the event itself is not alterable.

All keys are under the HKEY_LOCAL_MACHINE\SOFTWARE\TOPCALL\TCWEB\ key in the registry.

Value Name	Description and Allowable Values	Type	Default
OptEvent\ ShowNonInEvent	Defines which EventTypes users can access 0... Only In Events are accessible for all users.	DWORD	1

	1... System users can see all event types.		
	2... Group and system users can access all event types.		
	3... All users can access all event types.		

In order to see the Event Type column in the Events tool, it must be enabled in the corresponding registry key "OptEvent\EventType\ShowAdmin" (see "Configuring Visibility"). The "OptEvent\EventType\ShowAdmin" key must have a value equal or greater than the value of the "OptEvent\ShowNonInEvent" key, so that this column will be visible for all configured users.

Special Notes on Events

Once an event has been created, the EventType can no longer be edited.

Events of the event types MsgWaitOn and MsgWaitOff can only have their action further configured. The Service, DeliveryType, ErrorFilter and RecipientType fields have no meaning for this type of event and cannot be configured.

There can be only one event of the type MsgWaitOn.

There can be only one event of the type MsgWaitOff.

4.9 Recipient Editor

The system administrator can configure the "New Recipient" and "Edit Recipient" tools. These changes will apply for all users on the TC/Web installation. It is possible to hide a number of the features, the button to add an address, the button to delete an address, the display of the answerback field in each address, and the display of the Department field.

Hiding the "New Address" and the "Delete Address" button mean that a recipient will always have exactly one address. (The recipient will only have one address as long as recipients are only edited via TC/Web. It will still be possible to add additional addresses with TCfW.)

These features allow the "New Recipient" and "Edit Recipient" tools to be simpler to operate for the end user.

Registry keys:

- RecipientHideAnswerback – If the key is set to 1, the answerback field of every address will not be displayed, the user will also not be able to edit the answerback field. Please note that if the recipient's answerback field contains data, which was e.g. entered in TCfW, this data will remain and will not be affected when a user edits this recipient. This key simply controls whether the answerback input field is displayed to the user or not.
- RecipientHideDepartment – If the key is set to 1, the department field of the recipient will not be displayed. Please note that if the recipient has data in the department field, this data will remain and will not be affected when a user edits this recipient.
- RecipientHideNewAddress – If the key is set to 1, the "New Address" button will not be displayed in the Recipient editing form. This means that a user cannot add an additional address to a recipient. Of course, a new address can be added in TCfW. If a recipient has more than one address, all addresses will be shown in TC/Web, regardless of the setting of the "RecipientHideNewAddress" key. This key simply controls whether the "New Address" button is visible or not.
- RecipientHideDelete – If the key is set to 1, the "Delete Address" button will not be displayed at the end of each address.

Please see "TC/Web Registry Settings" for further details on these registry keys.

4.10 Distribution List Editor

The system administrator can configure the "New Distribution List" and "Edit Distribution List" tools. These changes will apply for all users on the TC/Web installation.

It is possible to configure whether the high priority and low priority selectors are visible to the user or not. It is also possible to configure whether the user can see the control to switch a list between a Temporary and a Normal status. A list that has a Temporary status will automatically be deleted once a job has been sent to this list.

Registry keys:

- **DLEditDisplayPriority** – If the key is set to 1, the Priority dropdown boxes will be displayed. If the key is set to 0, the Priority dropdown boxes will not be displayed.
- **DLEditDisplayTemporary**– If the key is set to 1, the radio buttons allowing a user to switch between normal and temporary will be visible whenever the user edits a list. If the key is set to 0, the radio buttons will not be displayed.

Please see “TC/Web Registry Settings” for further details on these registry keys.

4.11 Distribution List Export

A user can export the recipient data from a distribution list to a text file. This is done by opening a distribution list and clicking on the “Export” button at the top of the Distribution List view.

A key in the windows registry allows a system administrator to switch between two options:

Whether all supported fields are exported: Attention, Service, Number, RecipientID, UserID, Type, Freetext, DelTypeDef, Company, Department, UserBelongsTo, Active, DirsyncAllowed

Or only Attention, Service, Number, RecipientID fields are exported.

Another key allows the Administrator to select whether files will be exported as comma delimited text files (CSV) or as tab delimited text files (TSV).

Registry keys:

- **DLExportMinimumFields** – When set to 0, all fields are exported. When set to 1, the minimum fields are exported.
- **DL_FileFormat** – Sets the format for exporting Distribution lists. 1 sets it to CSV. 2 sets it to TSV.

See section “TC/Web Registry Settings” for further details on this key.

4.12 Distribution List Import

TC/Web allows users to import text files of recipient data into distribution lists. But what if recipients in the text file have the same RecipientID as existing recipients in the user’s address books?

TC/Web implements three different modes for handling this issue: “Merge”, “Create New”, “Update”

Please see the TC/Web User Manual for more information.

Registry keys allow a system administrator to configure which modes are available to all users on the system.

Setting the key to 1 makes the mode available for all users, setting the key to 0 disables it for all users.

If none of the modes are configured in the registry, the “Update” option will be used by default.

Registry keys:

- **DLImportEnableModeUpdate**
- **DLImportEnableModeCreateNew**
- **DLImportEnableModeMergeAddresses**

See section “TC/Web Registry Settings” for details.

Further details on the “Update” import mode:

The Update mode is only intended to be used with recipients with one address.

Since distribution lists consist of a list of links to recipients, whenever a recipient is updated via an import, all distribution lists including this recipient will be affected by the change. The user is not informed about which distribution lists have been affected by the change to the recipients.

List updating is only supported in group and user address books. It is not supported in the system’s address books.

For security reasons, the user entries which are stored as recipient entries in the system’s address book will not be updated. Only recipients that are not associated with a user will be updated. (This is why list updating is not supported in the system’s address book).

If a text file containing the RecipientID of an existing user in the system is imported, this user will be included in the newly created or updated distribution list. However, the data of the user’s recipient entry will not be changed, nor will the addresses.

If a text file containing the RecipientID of an existing distribution list in the system is imported, this distribution list will be included in the newly created or updated distribution list.

Importing a text file to a distribution list will only update recipients in the address book the distribution list belongs to.

The update mode will only work if the text file contains the RecipientID of the recipient.

All importing processes are running in the background. The user submits an import file to TC/Web which will be placed in an import query. It is possible to run from 1 to 5 imports at the same time (per server). The user can disconnect from TC/Web, but the import file which he/she has submitted will be imported.

The following registry keys are used to configure the distribution list import:

The path to the following registry values is HKEY_LOCAL_MACHINE\Software\TOPCALL\TCWEB

Key name	Value type	Description
TCDISTMF ImportsPath	STRING	Path for Distribution list import temporary files Default: C:\TCOSS\TCWEB\Imports\

The path to the following registry values is HKEY_LOCAL_MACHINE\Software\TOPCALL\TCDISTMF2_SVC

Key name	Value type	Description/Default value
ImportsQueryPath	STRING	Path for Distribution list import temporary files Default: C:\TCOSS\TCWEB\Imports\
ImportThreads	DWORD	A number of import processes which can be run at the same time (per server). Default: 2 Max: 5
UpdateModeNoCheck	DWORD	0... Default mode 1... During 'Update recipient' mode, no checks for recipient and address book will be done. (only while importing to personal address book) Please be sure that Distribution List must be in user's address book.

Note: Tracing settings (key TraceLevel) must be enabled (set) under the HKLM\Software\TOPCALL\TCDISTMF2_SVC registry key.

Note: TCDISTMF2 must be restarted after changing the settings under the key HKLM\Software\TOPCALL\TCDISTMF2_SVC.

4.13 Enable Nested Distribution Lists

Distribution lists can contain other distribution lists. If a job is sent to a list, it will be sent to all recipients in that list and to all recipients of any of the lists it includes. There is no limit for how deep the nesting can go.

However, there are limitations to this feature:

TC/Web supports nesting distribution lists but in all displays and alerting cases, only the direct "parents" of a recipient are considered – and only the direct "children" of a list are considered:

In the Distribution List tool, a column displays the number of recipients in each distribution list. This number only indicates the number of items that this list contains. If a list contains another list, this list will only count as 1 recipient. For example, if a list with the name ListAlpha contains RecipOne, RecipTwo and ListBeta, ListAlpha will display that it contains 3 recipients regardless of how many recipients ListBeta contains.

Likewise, in the Recipients tool, and all views that show lists of recipients, the lists column displays in which lists the recipients are included. In this field, only the direct parents of the current recipient will be displayed. Coming back to the example, any recipients contained in ListBeta would display ListBeta as a parent list but they would not display ListAlpha.

Additionally, whenever a user edits or deletes a recipient belonging to a distribution list, TC/Web will display an alert indicating which lists will be affected if the recipient is edited. This alert only includes the immediate parents of the recipient. A distribution list containing another distribution list holding the recipient would not be listed.

Because of the limitations – and because nested distribution lists could confuse users, the feature can be turned on and off.

Value Name	Description and Allowable Values	Type	Default
DLNestedListsEnable	0... Do not allow lists to be nested in other lists. 1... Allow lists to be nested in other lists.	DWORD	0

The Select Recipients tool and the Distribution List Detail view has a new column “Type” which displays either Recipient, User, or Distribution List for each row. This field can be filtered on but cannot be sorted.

The visibility of the Type column can be configured with the following TC/Web registry keys:

Value Name	Description and Allowed Values	Type	Default
RecipientPicker\ RecipientType\ Show	0... Do not show column. 1... Show column.	DWORD	0
DistListDetail\ RecipientType\ Show	0... Do not show column. 1... Show column.	DWORD	0

4.14 Show Distribution Lists in Job View

The Jobs listed in the Active Jobs, Problem Jobs, and Completed Jobs tool can be configured to display the Distribution Lists that the job was sent to. This is analogous to seeing the recipient of a message in the Outbox tool.

Whether or not these columns are displayed will be configurable via a registry value for each tool. This is implemented identically to all other columns for the tools. See the “Tool Configuration” section for details.

Registry Keys

- For Active Jobs - TCWEB\JobView\JVLists
- For Completed Jobs - TCWEB\JobTerminated\JVLists
- For Problem Jobs - TCWEB\JobProblems\Custom1

If there is more than one list, the lists will be separated with a comma. If the total length of the Distribution List IDs exceeds the system configured, all but the last three characters of the field will be filled, and the last three characters will be filled with “...” to indicate that not all data could be stored. Please see the TC/Broadcast Technical Manual for details on configuring this value.

4.15 Display of TC/Broadcast Priorities, High1 – High10

If the priority of a message is not “normal”, an icon representing the priority will be displayed before the subject in the Message view.

Broadcast priorities High1-High10 can be configured to be displayed wherever the priority icons are displayed. Next to the red exclamation mark icon, a number between 1 and 10 is drawn for priorities High1 to High10.

A registry value, DisplayPriorityNumber, determines which users can see the number 1-10 for the priorities High1-High10 depending on the user’s administrative rights.

The path to the following registry values is HKEY_LOCALMACHINE\TOPCALL\TCWEB\

Value Name	Description and Allowable Values	Type	Default
DisplayPriorityNumber	The value determines which users can see the number indicating the Broadcast priorities High1-High10 0... never displayed. 1... only displayed to system user administrators 2... only displayed to group user administrators and system user administrators 3... displayed to all users	DWORD	1

4.16 New Message

Four tips explaining how to address messages for different services can be configured to be displayed or not on the New Message tool. With these registry keys the system can be configured to show tips only for the available services.

- DisplaySendTipEmail
- DisplaySendTipFax
- DisplaySendTipSms
- DisplaySendTipVoice

See section “TC/Web Registry Settings” for details.

4.17 Message Forwarding

TC/Web can be configured to not include information of the original message in a new message. These settings are global.

The path to the following registry values is HKEY_LOCALMACHINE\TOPCALL\TCWEB\

Value Name	Description and Allowed Values	Type	Default
MessageForwardNoBody	This value determines if the body of the original message is included in the body of the forwarded message. 0... Included 1... Not included	DWORD	1
MessageForwardNoHeader	This value determines if the header of the original message is included in the forwarded message. 0... Included 1... Not included	DWORD	1
MessageForwardNoSubject	This value determines if the subject of the original message is copied to the subject of the forwarded message. 0... Copied 1... Not copied	DWORD	1

4.18 Message Forward Locking

TC/Web can be configured to prevent that a particular message in the inbox is forwarded more than once.

This behavior is controlled by two per-system TC/Web registry values of the type REG_DWORD:

The first one ("ForwardLockingEnable") controls forwarding of the active messages, and the second one ("ForwardTerminatedEnable") controls forwarding of the terminated (completed) messages.

Value Name	Description and Allowed Values	Type	Default
ForwardLockingEnable	This value determines whether active message in the Inbox can be forwarded multiple times or not: 0... can be forwarded multiple times 1... can be forwarded only once	DWORD	0
ForwardTerminatedEnable	This value determines whether terminated message in the Inbox can be forwarded multiple times or not: 0... cannot be forwarded anymore 1... can be forwarded	DWORD	1

In order to prevent multiple forwards of active inbox messages, set the value for "ForwardLockingEnable" to 1, which changes the behavior in the following way:

- After any active message has been forwarded from an inbox, it gets the "forwarded" status in the status column of the inbox view.
- If two different users would attempt to forward the same message at the same time, only one succeeds and the other gets an error.
- As soon as such a message gets the forwarded status, it is not possible to forward it again as all corresponding buttons/context menu entries would be missing.

Furthermore, there is a possibility to disable the Reply, Reply All and Edit functions which could be misused to avoid the forward locking feature.

Therefore it is recommended to disable the Reply and ReplyAll function by setting the following registry value to 0:

Value Name	Description and Allowed Values	Type	Default
ReplyEnable	If this key is set to 1, reply and reply all buttons in the message windows and in the list view's context menu are enabled. If set to 0, neither reply nor reply all buttons are not visible	DWORD	0

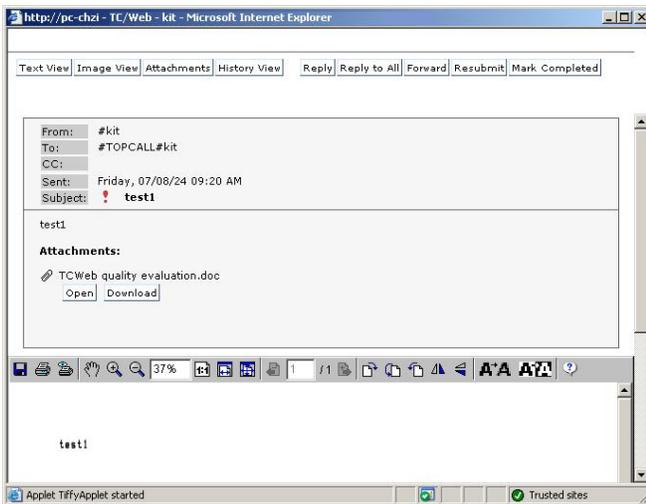
	(disabled).		
EditEnable	If this key is set to 1, edit command in the list view's context menu is enabled. If set to 0, edit command is not visible (disabled).	DWORD	1

Restrictions:

- Forward locking feature works for the messages in the Inbox only.
- If ForwardLockingEnable = 1, forwarded messages are posted directly to the tcoss and not through TC/LINK-SM anymore.
Therefore no document and/or image conversion functionality is provided, so for example, if the user adds a word attachment to the forwarded message, it doesn't get converted to tiff image.
- This new locked forward method is only dedicated to forward messages from the Inbox to KCS users. If an incoming fax would be forwarded in this way to another fax recipient, the original fax message would get lost.
- The forward locking only works properly with the advanced address grid, please double check that it is configured by setting the registry value HKLM\Software\TOPCALL\TCWEB\DisplayAddressSelectorWithGrid to 1.

4.19 Display Image Viewer in a Message Text View

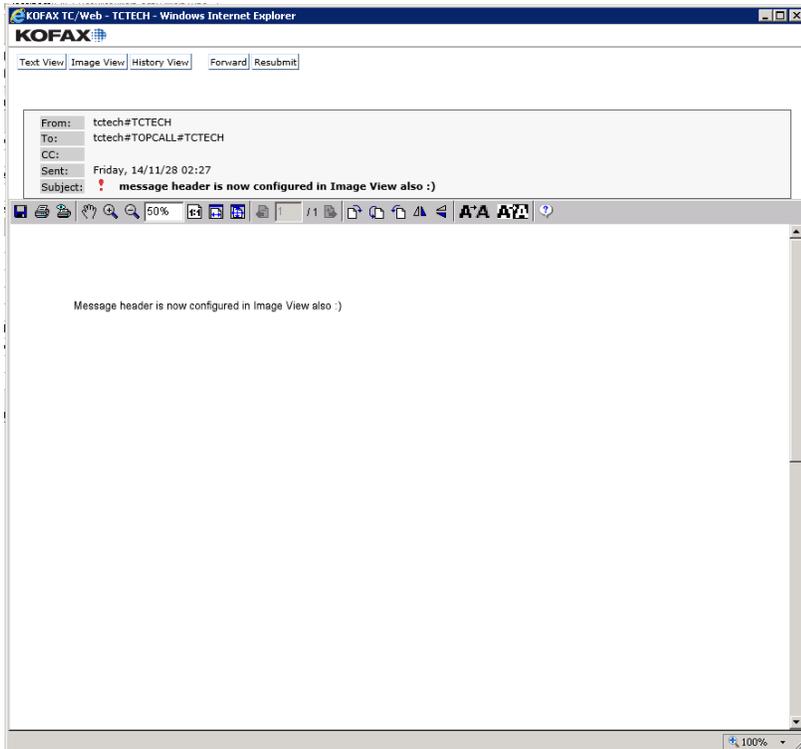
TC/WEB can be configured to display image viewer also in Text View. This setting is global. It affects all message folders accessible to the user (Inbox, Outbox, Public, Private, Archive).



Value Name	Description and Allowed Values	Type	Default
MessageImageInTextView	Defines if image viewer is also visible in Text View 0... Images are not displayed in Text View 1... Image viewer is displayed in Text View	DWORD	0

4.20 Display Message Header in a Message Image View

TC/WEB can be configured to display message header in Image View. This setting is global. It affects all message folders accessible to the user (Inbox, Outbox, Public, Private, Archive).



Value Name	Description and Allowed Values	Type	Default
MessageHeaderInImageView	Defines if message header is displayed in Image View 0... MessageHeader is not displayed in ImageView 1... MessageHeader is displayed in ImageView	DWORD	0

4.21 Display Sent Status in Message Header View

In TC/WEB, the "Sent" label is now replaced by the "Status" label, which displays the status of the message and error (if any) in the message header of both the Text and Image views.

The messages which are already sent have green color in the status. The red color is specified for the messages which were not sent due to problems or cancelled and are already (negatively) terminated, that is, no send retries will be done.

The new label "Status" now displays the status of the message as shown below:

- Status: sent ok (in Green Color), followed by its sent time
- Status: active-forwarded, followed by its sent time
- Status: its (scheduled) sent time
- Status: problems (negatively terminated, in Red Color), it displays last error message as tooltip (if SendShowErrorInStatusLine=0[default]), when the user hover the mouse over the status text.
- Status: cancelled (negatively terminated, in Red Color)

The Status line of all remaining states of active messages (those for which some send attempts are still to be done) displays only message status, for example:

- Status: Waiting
- Status: Sending
- Status: active

When message in outbox has status “problems” and SendShowErrorInStatusLine=1,

```

From: tctech#TCTECH
To: SMTP#a2@asia.kofax.com
CC:
Subject: ! sm234
Status: problems [LV]-Domain unknown/Message cannot be delivered to mail recipient

```

When message status is “sentOK” in outbox,

```

From: tctech#TCTECH
To: tctech#TOPCALL#TCTECH
CC:
Auth #a1
Subject: ! mb
Status: sent ok Friday, 15/04/17 02:53 AM

```

Messages is in Waiting state

```

From: tctech#TCTECH
To: c1#TOPCALL#c1
CC:
Auth #a1
Subject: ! custime 5min
Status: waiting

```

4.22 Use PDF for Image View / Fax Forwarding

TC/Web can be configured to use PDF format instead of TIF for the following functions:

- Display messages in Image View
- Forward incoming faxes via email

PDF format is not supported if you are viewing the message in Text View with an embedded image viewer.

The Java-based Tiffy viewer is not needed; however, each client needs a PDF viewer, or a browser capable of displaying PDF documents.

Value Name	Description and Allowed Values	Type	Default
FaxAttachmentImage-FormatSend	Image format for fax attachments when sending (forwarding) incoming faxes 1 ... TIFF 7 ... PDF	DWORD	1
FaxAttachmentImage-FormatView	Image format for fax attachments when viewing incoming faxes (open message function) 1 ... TIFF 7 ... PDF	DWORD	1

4.23 Automatically Open First Attachment from a Message View

In the configuration file it is possible to configure the first attachment of a specified format (extension) to be opened automatically in the new window.

The list of formats that will be automatically opened is configurable through the config.xml file in the application folder (C:\TCOSS\TCWEB\). Formats are stored under <attachmentsAutoOpenType> item in the config.xml.

When a user opens a message which contains an attachment type that was configured to be automatically opened, a new window will be opened and the attachment will be displayed in that window.

In case the opened message contains more than one attachment configured to automatically open, only the first attachment will be opened automatically.

```
</voiceFormats>
<attachmentsAutoOpenTypes>
  <attachmentsAutoOpenType id="0">PDF,DOC</attachmentsAutoOpenType>
</attachmentsAutoOpenTypes>
</settings>
```

Picture 49: Config.XML auto open types example

4.24 Pages Column

In the Inbox, Outbox, Public, System, and Archive views it is possible to display the pages column. This column contains the number of pages of a message. The column is filterable in all views except for the Archive view. By default, the column is not displayed. Like all the other columns, it is enabled in the registry.

The path to the following registry values is HKEY_LOCALMACHINE\TOPCALL\TCWEB.

Value Name	Description and Allowed Values	Type	Default
Inbox\Pages\Show	0... Pages column not displayed in Inbox view 1... Pages column displayed in Inbox view	DWORD	0
Outbox\Pages\Show	0... Pages column not displayed in Outbox view 1... Pages column displayed in Outbox view	DWORD	0
Public\Pages\Show	0... Pages column not displayed in Public view 1... Pages column displayed in Public view	DWORD	0
System\Pages\Show	0... Pages column not displayed in System view 1... Pages column displayed in System view	DWORD	0
Archive\Pages\Show	0... Pages column not displayed in Archive view 1... Pages column displayed in Archive view	DWORD	0
JobProblems\Pages\Show	0... Pages column not displayed in Problem Job view 1... Pages column displayed in Problem Job view	DWORD	0
JobViewDetail\Pages\Show	0... Pages column not displayed in Job Detail view 1... Pages column displayed in Job Detail view	DWORD	0

4.25 Prohibit Upload of Files Without Extensions and Limitation to file Extensions to Upload

TC/Web can be configured so that a file without a file extension cannot be uploaded in the Send Message or Send Job forms. This is necessary for documents that will be converted to FAX because currently, the document converter cannot parse files that do not have extensions.

TC/Web can be configured to upload desired file extensions by setting SendFormUploadAttachmentWhiteList registry Key. It should be in the format of **fileextension1; fileextension2; fileextension3;** Example: **pdf;jpg/png; ...** And files with only these extensions are uploaded and remaining files are not uploaded.

By default SendFormUploadAttachmentWhiteList is " * ", which means files with all types of extensions are allowed to upload.

If SendFormUploadAttachmentWhiteList is empty ,then attachments cannot be uploaded.

Value Name	Description and Allowed Values	Type	Default
SendFormUploadRequireExtensions	Defines whether the feature is enabled or not 0... Attachments without extension allowed 1... Attachments without extension not allowed	DWORD	0
SendFormUploadAttachmentWhiteList	This key requires the extensions of files in the format extension1;extension2; ... Example: pdf; gif; etc.. which means only these file extensions are only uploaded by TCWEB Default value is "*" which means all file extensions are accepted for uploading the attachments. If SendFormUploadAttachmentWhiteList is empty	STRING	*

	,then attachments cannot be uploaded.		
--	---------------------------------------	--	--

4.26 Maximum Size of File Uploads

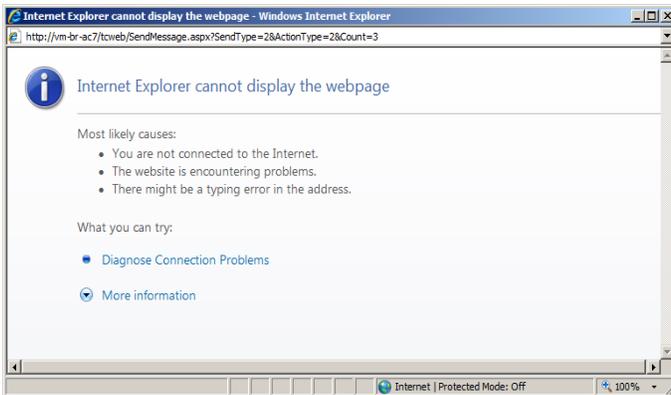
There are two settings to control the maximum file upload size:

TC/Web ASP.NET maximum client request length threshold

The maximum permitted client request size set by default to 32 MByte in the TC/Web's web.config ASP.NET configuration file with the following command:

```
<httpRuntime maxRequestLength="32768" />
```

If any of the client's upload requests exceeds this threshold, IIS would simply cancel the session and the user will get an error like this:



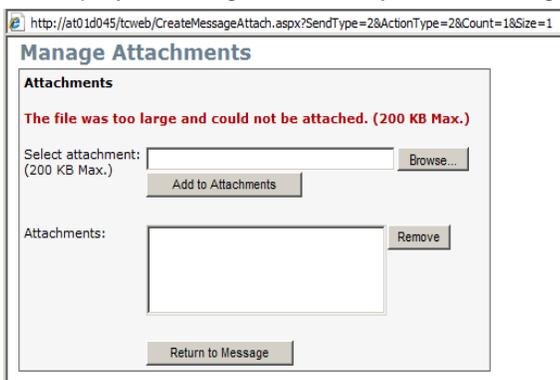
Picture 50: File upload size exceeds TCWeb ASP.NET threshold

Note: It is not recommended to increase maxRequestLength threshold in the web.config file to values higher than 100MByte. If any changes were done in the web.config file, they will be overwritten during the next TC/WEB setup (both full KCS setup but also TC/Web module update).

TC/Web Application maximum file upload threshold

It is defined by the registry value TCWEB\DisplayTipMaxUploadSizeK. The default value is "200" for 200kByte.

In the case user attempts to add an attachment to the message with the size exceeding this threshold, TC/Web will display following user-friendly error message to the user:



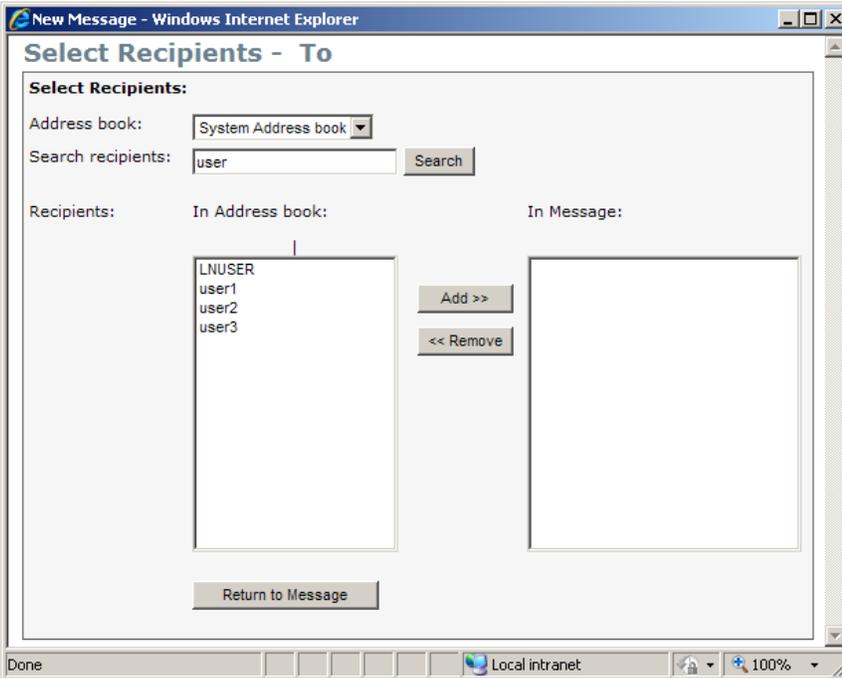
Picture 51: File upload size exceeds TCWeb application threshold

Note: TCWeb file upload threshold must be lower than maxRequestLength threshold in the web.config file!

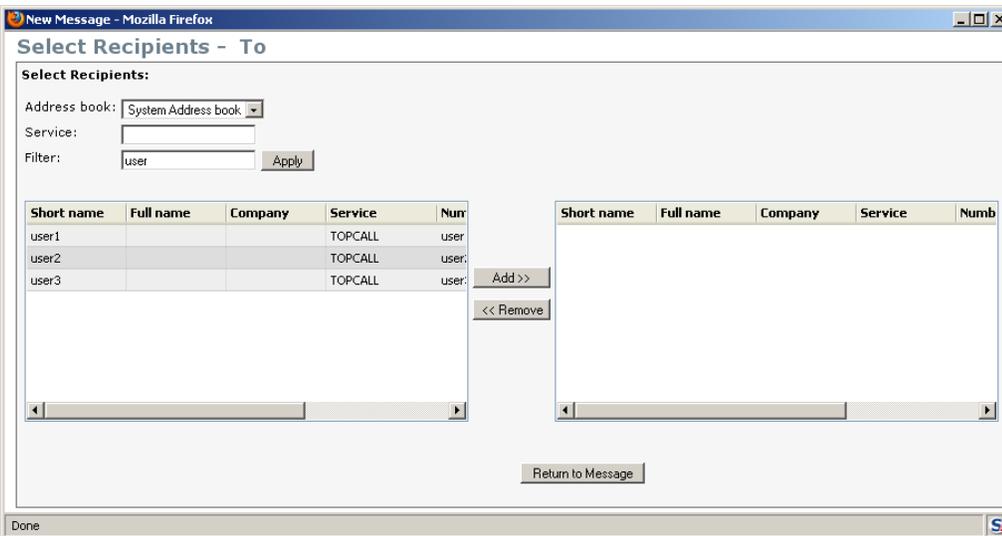
4.27 Configure Recipient Selector in Compose Message Tool

TC/Web offers two different tools for recipient selection.

TC/Web can be configured via a registry key on a system-wide level to either show the new list selector or to show a new recipient selector. The old selector has two list boxes: one containing all available recipients, and the other one containing the recipients selected by the user. The new selector has two grids which contain the same recipients, but with additional information.



Picture 52: TC/Web recipient selector old



Picture 53: TC/Web recipient selector new

With the following TC/Web registry key you can select which recipient selector (Address book tool) to display:

Value Name	Description and Allowed Values	Type	Default
DisplayAddressSelectorWithGrid	0... Show recipient selector without grids. 1... Show recipient selector with grids.	DWORD	0

Initial (default) value for the field "Service" can be defined with the following registry values:

Value Name	Description and Allowed Values	Type	Default
Compose\RecipientServiceFilter	KCS Service to be used for TO:, CC: and BCC: recipients (e.g. "FAX" for recipients with KCS service "FAX")	STRING	""

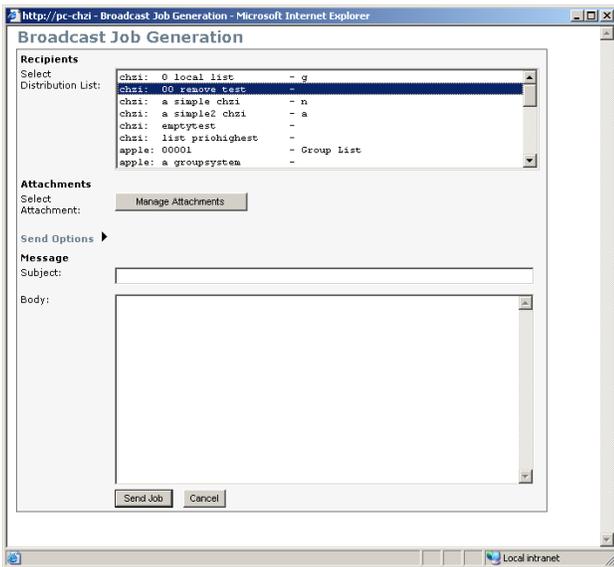
Compose\ AuthServiceFilter	KCS Service to be used for the message authorizer (e.g. "TOPCALL" for authorizers with service "TOPCALL")	STRING	""
-------------------------------	---	--------	----

This initial value, if defined, will be used only for the very first time particular user uses the address book tool. Then its value will be saved in the user's user profile on the KCS Server and will be used for all subsequent logins (of the same user)

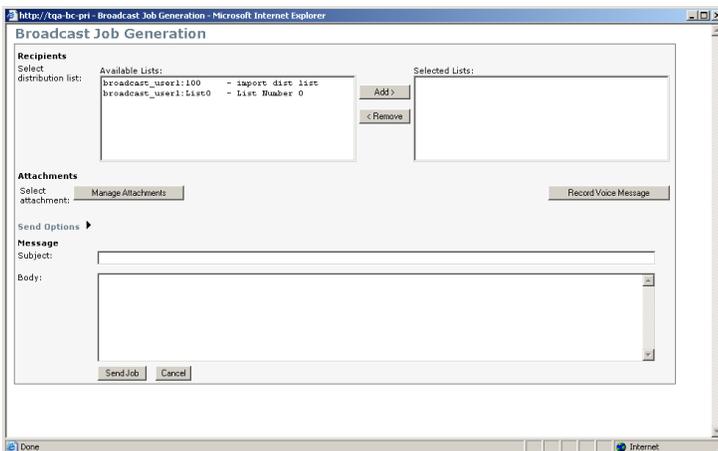
4.28 Configure List Selection Control in Compose Job Tool

Previously in TC/Web, the list selector in the Compose Job window was always a simple list box, and if the user wanted to send to more than one list, he/she had to select multiple lists using the Ctrl or Shift key.

TC/Web can now be configured via a registry key on a system-wide level to either show the old list selector or to show a new list selector optimized for selecting multiple lists. The new selector has two list boxes: one containing all available lists and the other one containing the lists selected by the user. Lists are moved to the "Selected Lists" box via an "Add" and "Remove" button.



Picture 54: TC/Web list selection old



Picture 55: TC/Web list selection new

TC/Web registry key to select which list selector to display:

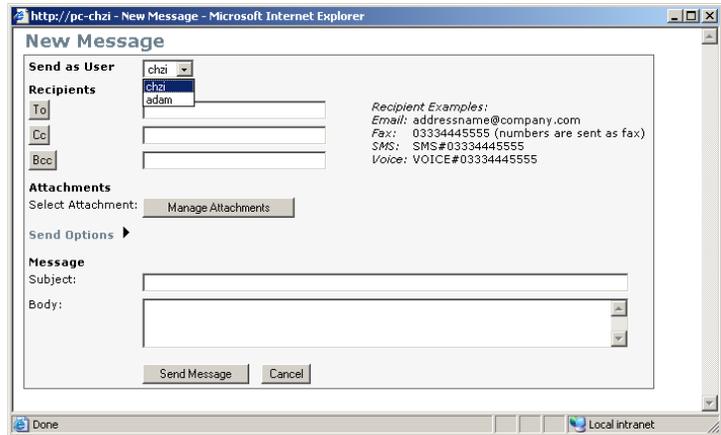
Value Name	Description and Allowed Values	Type	Default
DisplayComposeJob2Lists	0...Show only one list box. (Previous implementation) 1...Show two list boxes.	DWORD	0

4.29 Sending Messages and Jobs While UserSwitched

The behavior of the New Message and New Job forms while an administrator is “switched” to another user can be customized in several ways.

The TCWEB\MessageFormSendWhileSwitched registry key controls whether or not an administrator can send a message or job while being switched to another user.

Another registry key, TCWEB\MessageFormSendAsSwitchedUserEnable, enables a new “Send as User” select box control on the send form allowing an administrator to choose from whose user account the message will be sent: from the administrators, or from the user that the administrator is switched to.



Picture 56: New Message window

By using these features, an administrator can now switch to another user and send a message or job as if he/she were that user.

Registry keys (all under the TCWEB registry key):

Value Name	Description and Allowed Values	Type	Default
MessageForm-SendWhile-Switched	Can an administrative user send a job or message while switched to another user? 0... No user can send while switched. 1... Only system user administrators can send while switched. 2... Group user administrators and system user administrators can both send while switched.	DWORD	1
MessageForm-SendAsSwitched-UserEnable	The value determines for which users a “Send as User” select box will be drawn on the send form, allowing the user to choose from whose user account the message is sent. 0... never displayed. 1... only displayed to system user administrators 2... displayed to both group user administrators and system user administrators	DWORD	1
MessageForm-SendAsSwitched-UserDefault	Sets which user id is selected in the “Send as User” select box by default. 0... the user id of the administrative user 1... the user id of the switched user	DWORD	0

4.30 User Can Select Length of Lists

TC/Web can be configured so that the user can select how many items are shown per page in the list views. At the top of every list, a dropdown box allows the user to select how many items should be displayed from a list of system defined values. There is a default option displayed at the top of the list. If the default option is selected, the number of items displayed per page for the current tool will be as defined in the registry for that tool in the “entries” sub key for that tool.

If a user selects another value from the dropdown list, the list will immediately be re-rendered and the user is presented with the beginning of the list. The value the user selects is saved. This value will then be used in all tools and will be remembered whenever the user logs out and logs in again.

If the feature is not enabled, the page size will be determined, as previously, by the “entries” subkey for each tool.

Note: It is recommend to keep the page size values under 100. The higher the value, the longer the list will take to load, and the more strain will be put on the web server. Also, if the page size is too large, the page can take so long to generate that the page timeout of the server will be reached and the user will be delivered a message that the requested page could not be delivered.

Value Name	Description and Allowed Values	Type	Default
PageSizeDropDownEnable	Defines whether the feature is enabled or not 0... Dropdown is not displayed to user. 1... Dropdown is displayed to user.	DWORD	1
PageSizeDropDownValues	This comma delimited list holds the values that will be available to the user in the dropdown box. Values of 0, non-integer values, and text values will be ignored. Values under 100 recommended.	STRING	10,15,25,50

4.31 System Default for Message Preview View

Whether the preview windows is displayed by default for the message tools (Inbox, Outbox, Archive, System Folder, Private Folder, Public Folder) can be configured in the registry for all users. Once a user chooses whether to display the preview or not, their choice will be remembered.

Value Name	Description and Allowed Values	Type	Default
DisplayMessagePreviewByDefault	0... preview not displayed by default. 1... preview displayed by default.	DWORD	0

4.32 System Default for Inbox Status Filter

Whether the preview window is displayed by default for the message tools (Inbox, Outbox, Archive, System Folder, Private Folder, Public Folder) can be configured in the registry for all users. Once a user chooses whether to display the preview or not, their choice will be remembered.

Value Name	Description and Allowed Values	Type	Default
InboxFilterStatusDefault	Filter on status: 0... show all messages 1... show new and read messages 2... show only new messages	DWORD	1

4.33 Multiple Archive Tools

TC/WEB can be configured so that users have more than one archive tool, e.g. “Archive 1”, “Archive 2”, “Archive 3” or “Archive 4”. It is possible to enable 3 additional archive tools at most. Filters and settings are different for all archive tools, so the user can have different filters in different archive tools.

Value Name	Description and Allowable Values	Type	Default
ExtraArchiveFolders	Defines how many additional Archive tools will be displayed for the user (0-3)	DWORD	0

Note: All Archive tools are connected to one TC/Archive which is configured in the registry. It is impossible to connect to different TC/Archive instances from one TC/Web instance.

4.34 Configurable Filter Options

By default, the filter page contains all available filters which can be applied. The administrator can configure which filters to display. The filters must be configured through C:\TCOSS\TCWEB\config\filters.xml, section <filter_fields>. By default, all available filters are visible.

```
<configuration xmlns="tcweb">
  <tools>
    <tool id="APP_ARCHIVE">
      <filter_fields>
```

```

    <filter id="USER_FILT_CUSTOM1" visible="1"/>
    <filter id="USER_FILT_CUSTOM2" visible="1"/>
    <filter id="USER_FILT_CUSTOM3" visible="1"/>
    <filter id="USER_FILT_CUSTOM4" visible="1"/>
  </filter_fields>
</tool>
</tools>
</configuration>

```

All visible filter options must be described in <filter_fields> xml tag. As by default all filter options are visible, it is necessary to configure invisible options. Each filter option is configured with <filter> tag, "id" and "visible" attributes. The attribute "visible" can have the value "0" (invisible) or "1" (visible).

Tool IDs which can be configured:

Tool id	Description
APP_ARCHIVE	Archive
APP_ARCHIVE2	Archive 2
APP_ARCHIVE3	Archive 3
APP_ARCHIVE4	Archive 4

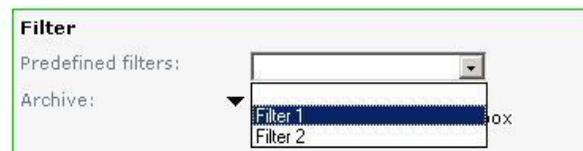
Supported field IDs are listed in next chapter "Predefined Filters".

Note: This feature currently works only with Archive tool(s)

4.35 Predefined Filters

The administrator can configure predefined filters, which is very useful especially for filters that are frequently used. If configured, the user can select a filter from the filter list.

ARCHIVE > **Filter**



Picture 57: Predefined filter selection

Predefined filters must be configured through C:\TCOSS\TCWEB\config\filters.xml configuration file, section <filter_default>.

Example of a predefined filter configuration:

```

<configuration xmlns="tcweb">
  <tools>
    <tool id="APP_ARCHIVE">
      <filter_default name="Filter 1">
        <filter id="USER_FILT_FOLDERNAME">
          <filter_value>1</filter_value>
          <filter_value>1</filter_value>
        </filter>
        <filter id="USER_FILT_TEXTSEARCH">
          <filter_value>test1|test2|test3|test4</filter_value>
        </filter>
        <filter id="USER_FILT_ORIGINATOR">
          <filter_value>orig1</filter_value>
        </filter>
        <filter id="USER_FILTRECORI">
          <filter_value>2</filter_value>
          <filter_value>dmgo</filter_value>
        </filter>
        <filter id="USER_FILT_TIME_LOW">
          <filter_value>05/01/01 07:11 AM</filter_value>
          <filter_value>06/12/31 08:12 PM</filter_value>
        </filter>
      </filter_default>
    </tool>
  </tools>
</configuration>

```

```

    <filter id="USER_FILT_RECIPIENT">
      <filter_value>rcp1</filter_value>
    </filter>
    <filter id="USER_FILT_COSTCENTER">
      <filter_value>cost1</filter_value>
    </filter>
    <filter id="USER_FILT_CUSTOM1">
      <filter_value>def_c1</filter_value>
    </filter>
    <filter id="USER_FILT_CUSTOM2">
      <filter_value>def_c2</filter_value>
    </filter>
  </filter_default>
</tool>
</tools>
</configuration>

```

The definition of each predefined filter starts with <filter_default> tag which must have an attribute "name" containing the name of the filter. By default, all filter options contain empty values, so the filter option should be added if you want to set any value to it. It can be done using a <filter> tag which must have an "id" attribute with filter id. Inside the <filter> tag, it is possible to define a default value or values for the filter option by using the <filter_value> tag.

Available filter ids and filter values

Filter id	Description	
USER_FILT_FOLDERNAME	Inbox, Outbox	Two values: one for Inbox, second for Outbox. (0 - unchecked, 1 – checked)
USER_FILT_TEXTSEARCH	Text search	List of words, separated by " " character
USER_FILT_ORIGINATOR	Originator	Free text
USER_FILT_RECIPIENT	Recipient	Free text
USER_FILTRECORI	User id	Two values, one for the originator type (0 – current user, 1 - group of current user, 2 – other user), second for id of other user
USER_FILT_TIME_LOW	Time from/Time to	Two values: valid date/time
USER_FILT_COSTCENTER	Cost center	Free text
USER_FILT_CUSTOM1	Custom 1	Free text
USER_FILT_CUSTOM2	Custom 2	Free text
USER_FILT_CUSTOM3	Custom 3	Free Tex
USER_FILT_CUSTOM4	Custom 4	Free Tex

Note: The number of predefined filters is unlimited.

Note: This feature currently works only with the Archive tool(s).

Note: The value for a predefined filter option will be ignored if this filter option is not visible by configuration.

4.36 Message View

A hidden webpage periodically refreshes the Message View window. With every refresh, TC/Web checks whether the user has hung up the phone after listening to a voice message. If yes, the Voice connection will be terminated.

With each refresh the user may hear a clicking noise or see that the browser has performed some activity. The frequency of this refreshing can be configured with the registry value VoiceDisconnectPollPeriod.

See section "TC/Web Registry Settings" for details.

4.37 Long Text for Error Codes

The Result column in the Outbox view will display the two-letter KCS error codes if there is a problem. Rolling over this two letter code shows a short description of the error code in a tooltip. The tooltip will also show the contents of the Response column if this is different from the error code description.

In order to view the response and error columns, they must be enabled in the registry.

The path to the following registry values is HKEY_LOCALMACHINE\TOPCALL\TCWEB\Outbox

Value Name	Description and Allowed Values	Type	Default
Error\Show	0... error column not displayed 1... error column displayed	DWORD	0
Response\Show	0... response column not displayed 1... response column displayed	DWORD	0

Each time a two digit error code is displayed (e.g. in the outbox), the users have the possibility to click on the error code, and a new window with an exact error description opens. Due to the fact that the detailed error description might depend on the customer's installation, the error description file is not supplied with installation.

To specify your own description file, the following registry key must be modified:

Value Name	Description and Allowed Values	Type	Default
ErrorCodeDescriptionUrl	URL to the error description file, e.g.: error.htm	STRING	""

By using this key, the customer can specify the reference to his error description file. If this registry key is empty, no detailed error description will be provided. Per default, this registry key is empty and no link will be displayed.

The error descriptions file is displayed in a new popup window. When the error description file opens, it will automatically jump to the corresponding error description via the error code bookmarks.

Example of an error description file:

```
<div><a name="XX"></a>XX - My description for error code XX</div>
```

In this example, XX is the error code.

4.38 Export Data from Outbox View

TC/Web can be configured to display an Export button in the Outbox view. Clicking on this button will generate a text file that is downloaded to the user. The text file will hold all available fields for the Outbox view, not just the fields configured to be visible. If the view is filtered, only the filtered data will be exported. Since the Outbox can hold a large number of records, a time limit exists for the export processing. If the time to export all of the filtered records exceeds the time limit, the export will stop and the user will be delivered a file with the records that were exported plus a message at the bottom indicating that the export was not complete.

Value Name	Description and Allowed Values	Type	Default
MessageExportEnable	Defines whether the feature is enabled or not 0... Export button is not displayed to user. 1... Export button is displayed.	DWORD	0
MessageExportFileFormat	The format to export the file in: 1... export as comma separated values (.csv) 2... export as tab separated values (.tsv)	DWORD	1
MessageExportTimeout	maximum number of seconds to perform the export; values from 0 to 120 are supported.	DWORD	30

4.39 Timeouts

4.39.1 Inactivity Timeouts

Inactivity timeouts are important for the security of the user and for the efficiency of a web application.

- Security: An inactivity timeout reduces the probability of an unattended browser running TC/Web being used by someone else.
- Efficiency: Inactivity timeouts increase the efficiency of a web server by reducing the number of simultaneous user sessions.

A new user session is created on the server whenever a user logs in. User sessions last until the user logs out, or an inactivity timeout forces a logout. Every user session uses resources on the web server, a server can only handle a finite number of user sessions.

TC/Web implements session inactivity timeouts in a flexible way. There is a default timeout value for every user specified by the "TimeoutSession" registry key. However, a user can change their session timeout from this

default value in the Options>Identity tool. A maximum timeout value specified in registry key "TimeoutSessionMaximum" limits how high a user can set the timeout.

An additional key, "TimeoutSessionMetamail" can be used to set a much shorter timeout value only used if the user opens a Metamail message.

A short timeout is acceptable here because a user typically acts on a single message in a short time frame. A short timeout is useful here because it is likely that many people could be accessing TC/Web at the same time on a Metamail system. See section TC/Web Registry Settings for details.

Maximum timeout might be affected by IIS settings. By default, it is limited to 20 minutes. Please refer to Microsoft documentation for hints how to increase this value:

For IIS 7 and 8: <http://technet.microsoft.com/en-us/library/cc771956.aspx>

4.39.2 Execution Timeout

When using the filter function on a large TCOSS (with many messages), the following error can occur :

```
[HttpException (0x80004005): Request timed out.]
```

This typically occurs when a server-side code function or macro executes for a period of time longer than the maximum timeout period allowed for server-side code execution.

Solution:

Adjust the executionTimeout attribute in Web.config file.

```
<httpRuntime executionTimeout="600" />
```

The ExecutionTimeout attribute of <httpRuntime> element in Web.config indicates the maximum number of seconds a request is allowed to execute before being automatically shut down by ASP.NET. The default is 110 seconds. This time-out applies only if the debug attribute in the <compilation> element is set to false.

4.40 History View

History view displays actions that were executed on a particular message. A TC/Archive is required to use the history view.

See section *History View* in the chapter *User Administration* for configuration details.

4.41 Login/Logout Auditing

Login/logout auditing traces all user logins/logouts into/from the TCOSS server. A TC/Archive is required to use the login/logout auditing view.

See section *Login/Logout Auditing* in the chapter *User Administration* for configuration details.

4.42 Log Entries

TC/Web can be configured to show all log/audit entries stored in the TC/Archive. TC/Archive is required for this feature to work. "Log Entries" feature is accessible under the "Security" menu in the TC/Web's main menu.

KCS provides the following different types of audit/log entries:

Source	Type	Description	Written By
AUDITLOG	LOGIN LOGOUT LOGIN_FAILED	User login/Logout auditing	TCOSS
AUDITUSR	USER_NEW USER_CHANGE USER_DELETE RECIPIENT_NEW RECIPIENT_CHANGE EVENT_IN_MAIL EVENT_MWON EVENT_MWOFF EVENT_DEL_NOTIF	User management audit	TCOSS

	EVENT_NON_DEL_NOTIF EVENT_BACK_REC EVENT_JOB_START EVENT_JOB_END EVENT_IN_RELEASE EVENT_OUT_RELEASE		
AUDITADB	RECIPIENT_NEW RECIPIENT_CHANGE RECIPIENT_DELETE	Recipient management audit	
AUDITSYS	MSG_LOG	Server message auditing (open, update,...) TS_ACTION: OPEN UPDATE ...	TCOSS
AUDIT	MESSAGE_LOG	Client message auditing (display, print,...) TS_ACTION: DISPLAY SAVE PRINT HISTORY PLAY ATTACHMENT_OPEN ...	TC/Web
FAX	Fax In Fax Routing Fax Scan Fax Command FIS Command Voice In Fax Out Voice Out	Fax module message logging	Fax Module
TCTECH	VLBC_LOG	Voicelink auditing	TC/Voicelink2

Each audit/log entry has a few common attributes, for example, Log Class, Type and Logging Time. It also include variety of different log/audit-type specific attributes which may vary for different types of log/audit entries, for example, TS_USER_ID, TS_WORKST_DESCR, SESSION_ID, TS_ACTION, TS_RECIPIENT, TS_ORIGINATOR etc.

"Log Entries" supports following columns (the language file index can be localized by adapting the LNG files):

Column name	Column name LNG index	Source TCSI field	Possible values in TC/Archive Log Entries	Log value LNG indexes
Log Class(*)	1595	TS_LOG_USER	AUDITLOG, AUDITUSR, AUDITADB, AUDITSYS, AUDIT,FAX,TCTECH(**)	1596-1602
Type	1485	UN_NAME	LOGIN, LOGOUT, RECIPIENT_NEW,..., USER_NEW,..., MSG_LOG, MESSAGE_LOG....	1603-1631
Action	1632	TS_ACTION		60-65, 1261-1272
Date/Time	1484	TIME_ACTION		

Error	1486	ERROR_CODE		
Workstation	1489	TS_WORKST_DESCR		
Session Id	1487	SESSION_ID		
Appl.Id	1490	TS_APPL_ID		
Source	1491	ID_SOURCE	TYPED_IN,...	
UserId	1488	TS_USER_ID		
MessageId	1633	TS_TC_MSG_ID		
Recipient	1634	TS_RECIPIENT		
From	1635	TS_ORIGINATOR		

(*) Log Class corresponds with the Source column in the Log Entries view of TCfW. This name is selected as there is already a Source column defined in TC/Web for the ID_SOURCE attribute.

(**) Log class "TCTECH" is generated by the TC/Voicelink module.

If in a particular log entry there is no value for predefined columns, the corresponding cells remain empty. For example, the values for Recipient and From columns remains empty for log entries with log class "AUDITLOG".

Now, with this version of TC/Web, there is an option to filter for:

- Log Class
- Date/Time
- UserId

In order to enhance log/audit entries which are not related with each other, the administrator can define up to four tabs with different filters with only relevant columns activated. For example:

- Login Logout auditing in the first tab
- User auditing in the second tab
- Recipient auditing in the third tab
- Fax log entries in the fourth tab

While the grid displays only some selected items from each log/audit entry, clicking on particular log entry row displays all the available details.

Localization:

- All header names of the log entries grid are localizable - Column name LNG file indexes are listed in the table above.
- Values of Log class, Type and Action are localizable - Log value LNG indexes are listed in the table above
By default, LNG files contain the same values that are stored with the log entry in TC/Archive for compatibility purposes with the log entries view of TCfW (which does not support any localization).
- All other information from the log/audit entries are shown as they are stored in TC/Archive without any localization possibilities.

4.43 TC/Web Localization

TC/Web is delivered with the following languages:

- 01 – English (default)
- 02 – German
- 03 – French
- 04 – Spanish
- 05 – Italian
- 06 – Simplified Chinese
- 07 – Japanese
- 08 – Portuguese (Brazilian)
- 09 – Russian

In order to work properly for a particular language/country, Windows regional settings and TC/Web language code page settings must be configured properly.

4.43.1 Windows Regional Settings

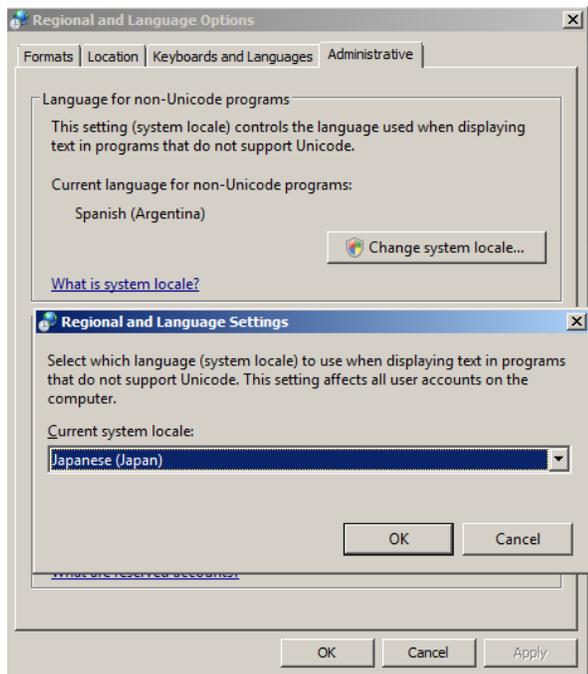
Windows Operating Systems are localized for variety of languages and countries in the world. Particular combination of language and country is expressed as “locale” (or “localeID”, “LCID”) which is a collection of language-related user preferences, including language, date/time, currency format etc. There are different locales defined for the same language but for different countries, for example LCID=1031 for German language in Germany and LCID=3079 for German language in Austria.

Please see <http://www.microsoft.com/globaldev/reference/lcid-all.msp?pf=true> for a list of locales supported by Microsoft. There are two important “locales” which must be properly set for localized TC/Web installation:

System Default Locale

This is a system-wide setting that is relevant for non-Unicode (ANSI) applications only. But as TC/Web is a non-Unicode application, System Default Locale must be set properly for the particular language/country.

It can be set via Control Panel | Regional and Language Options (2008) / Region (2012) | Administrative tab | Change system locale.

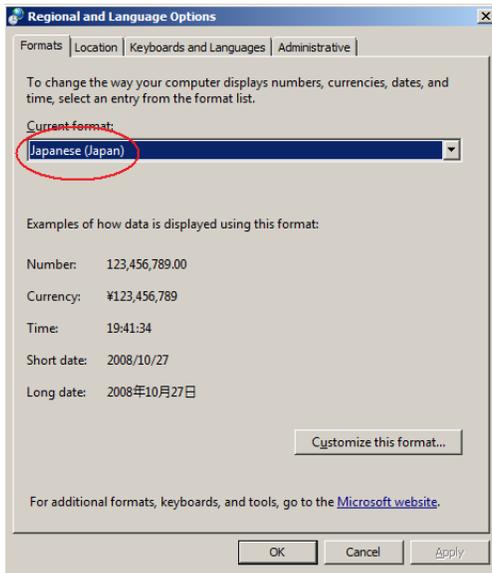


Picture 58: Windows 2008 System Default Locale

User Default Locale

This per-user setting defines user’s preferences for particular language/country. While system default locale is a single system wide setting, there may be different users using different user locales on the same system.

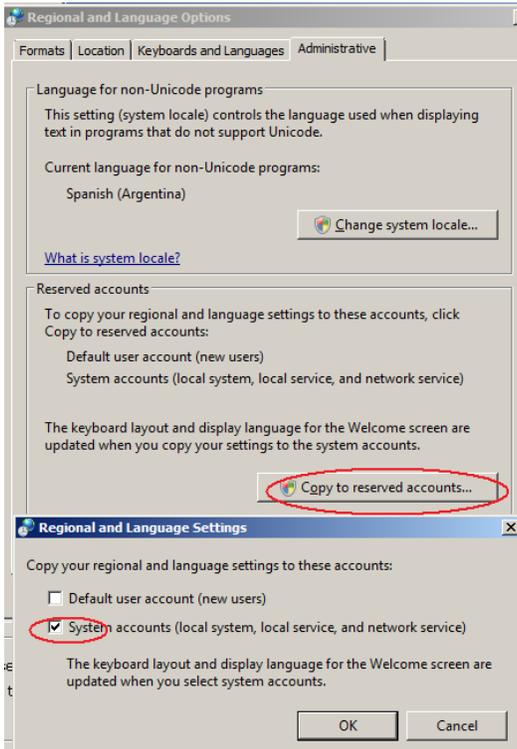
It can be set via Control Panel | Regional and Language Options (2008) / Region (2012) | Format tab | Current format (2008) / Format (2012):



Picture 59: Windows 2008 User Default Locale

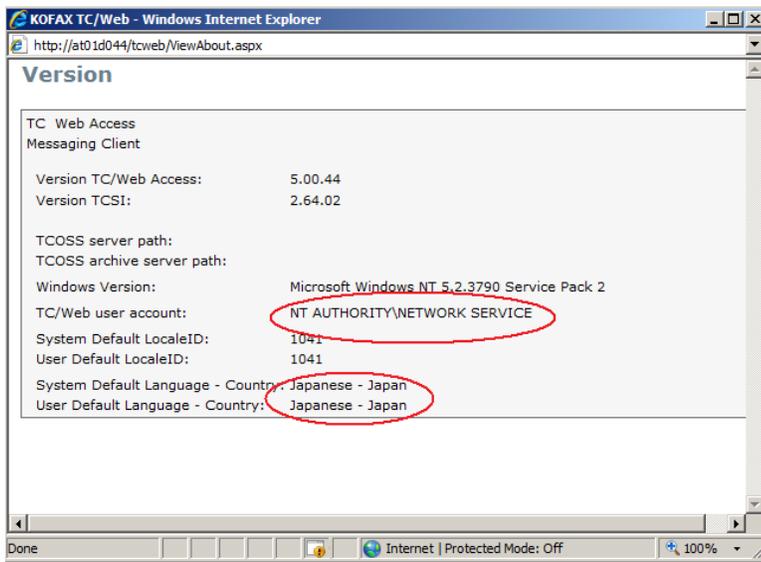
After both System and User Default Locales have already been set, they must still be applied to the user account in which context TC/Web is running. By default, this is the built-in Network Service account.

Copy the current regional settings to built-in accounts:



Picture 60: Windows 2008 Copy Locale Settings to built-in accounts

Restart Windows. Log on to the TC/Web and click the version link:



Picture 61: Check TC/Web locales being used

In this way, you can easily verify both System and User Default Locales and language-Country settings. Both of them must show the same language and country.

4.43.2 TC/Web Language Code Page Settings

TCWeb supports more than just the Western European code page and character set. Which code page and character set TC/Web should use is configured through four registry keys. However, usually only two of the keys need to be configured.

Registry Keys:

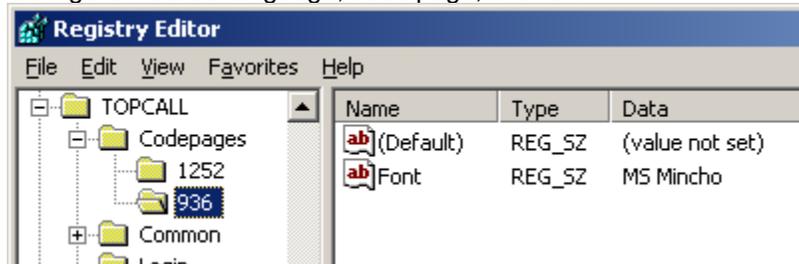
- **LanguageHtmlCharset**
This string registry value configures the HTML charset attribute used on the web pages displaying message data. The value here is used in the following line in the html headers:
<meta http-equiv="Content-Type" content="text/html; charset=[LanguageHtmlCharset]">
– The default is "windows-1252". This is the Western European character set.
– To set it to the Central European character set, use "windows-1250"
– To set it to Japanese character set, use "shift_jis"
– Set to "gb2312" for simplified Chinese
– Set to "windows-1251" for Russian
- **LanguageMailCharset**
This string registry value configures the character set to the user when posting messages and jobs from TC/Web
– The default is "ISO-8859-1". This is the Western European character set.
– To use Central European characters, use "ISO-8859-2"
– To use Japanese characters, use "ISO-2022-JP"
– Set to "gb2312" for simplified Chinese
– Set to "windows-1251" for Russian
- **LanguageTfcPCCodePage**
This key should normally be left as an empty string. TFC will normally automatically detect the language settings of the system. But if this value is not an empty string, this value will be used to override the detected settings.
This value sets the Windows code page of TFC.
– Must be empty if you are using a Unicode TCOSS.
– Set to "1252" for Western European characters.
– Set to "1250" for Central European characters.
– Set to "932" for Japanese characters.

- Set to “936” for simplified Chinese
- Set to “1251” for Russian
- LanguageTfcTCOSSCodePage
This key should normally be left as an empty string. TFC will automatically detect the language settings of the system. But if this value is not an empty string, this value will be used to override the detected settings.
This value sets the TCOSS code page of TFC.
 - Must be empty if you are using a Unicode TCOSS.
 - Set to “0” for Western European characters.
 - Set to “1” for Central European characters.
 - Set to “932” for Japanese characters.
 - Set to “936” for simplified Chinese
 - Set to “1251” for Russian

See section “TC/Web Registry Settings” for details.

4.43.3 Additional Settings

- Configure TC-LINK SM/OC language and code page
- Configure TCOSS language, code page, and font



- TCOSS server and archive server must have the same code page!

4.43.4 Language Customization

TC/Web supports multiple languages. All of the static text strings displayed in the user interface come from a language file located in the TC/Web install directory. A separate file holds the strings for each language. The file names are TcWeb##.lng where ## holds the number code for the language. If new strings are added to TC/Web to support new features, the strings must be added in all languages. To facilitate this task, TC/Web can be configured so that the ID of the text string is visibly displayed in the user interface. This is accomplished through the registry key ConfigAssistDisplayStringID. Note that the IDs will be visible to all users. Thus, this setting should not be activated on a production system.

Registry Keys:

ConfigAssistDisplayStringID

If this DWORD is set to 1, the ID of the text strings will be written before the actual strings in the user interface. The default is 0.

4.44 TIFFY Viewer Certificate Expiration

TC/Web uses a Java applet to display .tiff images. There are two packages: ach.cab – for Internet Explorer and ach.jar for Mozilla Firefox. In order to be executed by Internet Explorer or Mozilla Firefox these two packages must be signed with certificates. These certificates are valid for a short period of time (usually 1 year). TC/Web will recognize a certificate’s expiration 30 days in advance and will write a warning message to the Event log and warn configured users while they are trying to log in to TC/Web.

Value Name	Description and Allowable Values	Type	Default
CertificateExpiration-WarningMessage	Defines to which users a Tiffy Viewer certificate expiration message will be shown: 0... to system administrators only 1... to system and group administrators 2... to every user	DWORD	0

CertificateExpiration-WarningMessageText	Text of a certificate expiration message	STRING	[asked during installation]
--	--	--------	-----------------------------

Note: In order to write to the Event Log you must configure the permission for TC/Web to write to the Event Log. With the following registry key it is possible to configure TC/Web to update the Tiffy Viewer from a defined URL:

Value Name	Description and Allowable Values	Type	Default
CertificateAutoUpdateUrl	Defines where TC/Web should search updates for Tiffy Viewer (Ex.: http://tcweb-updates/updates/	STRING	"http://www.kofax.com/certificate/"

This path must be accessible from any server running TC/Web and must contain 3 files: version.xml, ach.cab and ach.jar.

The content of the version.xml file must be the following:

```
<configuration xmlns="tcweb">
  <certificates>
    <certificate>
      <validfrom>24.04.2005</validfrom>
      <validto>21.06.2006</validto>
      <file size="170300">ach.cab</file>
      <file size="209475">ach.jar</file>
    </certificate>
  </certificates>
</configuration>
```

If configured, and if there are less than 30 days left before certificate expiration, a configured user will be shown a popup window 'Certificate update', while logging in to TC/Web.

After clicking the "Update now" button, TC/Web will try to update the TiffyViewer applet. If TC/Web updates applets, a 'Certificates was updated!' message will be displayed.

Note: In order to update certificate TC/WEB must have write right for the following files in TCWEB directory : ach.cab and ach.jar.



Picture 62: Certificate will expire



Picture 63: Certificate update

4.45 Fax Attachments Extensions

TC/Web has been equipped with the feature to check if the extension of an attachment of a message with FAX as the recipient service is allowed.

In the registry key FaxAttachmentExtensions the value must be adjusted correctly to enable this feature. This key contains the allowed attachment extensions.

To edit this key the user can use the 'Registry Editor' program integrated in the Windows OS. By default, values of this key are left empty.

If the FaxAttachmentExtensions key is left empty, no checks will be performed on message sending.

For example, the user can set the 'FaxAttachmentExtensions' key to: TIFF, TIF, JPG, GIF. Now TC/Web will examine if all message attachments have the right extensions.

If TC/Web detects an attachment without a correct extension, a warning message will be displayed with the possibility to either continue or cancel the send order.



Picture 64: Default value of 'FaxAttachmentExtensions' key



Picture 65: Changed value of 'FaxAttachmentExtensions' key

4.46 Folder Search Timeout

When TCOSS has a lot of messages in the user's inbox or outbox, it may take some time to open these folders. If it exceeds the default timeout value, not all of the messages will be displayed. With the following registry key it is possible to configure the search timeout which will be used to open a TCOSS folder.

Value Name	Description and Allowable Values	Type	Default
SearchTimeout	Defines timeout for opening folders via TC/WEB	DWORD	60

4.47 Autologon

In order to support a single sign-on feature, TC/Web can be configured to use autologon. This means that TC/Web will log in to KCS Server with the Windows user name and domain.

For this to work properly, **Windows authentication must be enabled and anonymous authentication disabled for TC/Web** (see below).

There are two autologon modes:

1. "Legacy" autologon (corresponds with the registry value AutoLogonUserWithDomain= 0 or 1)
This mode is not recommended anymore if using KCS 10.0.1 or later as it is very unsecure
2. Windows authentication based autologon (registry value AutoLogonUserWithDomain= 2)
This is the most secure method which utilizes Windows security tokens up to the KCS Server, without any password being transferred

If autologon fails for any reason login with this user name fails, the user will be redirected to the standard login page.

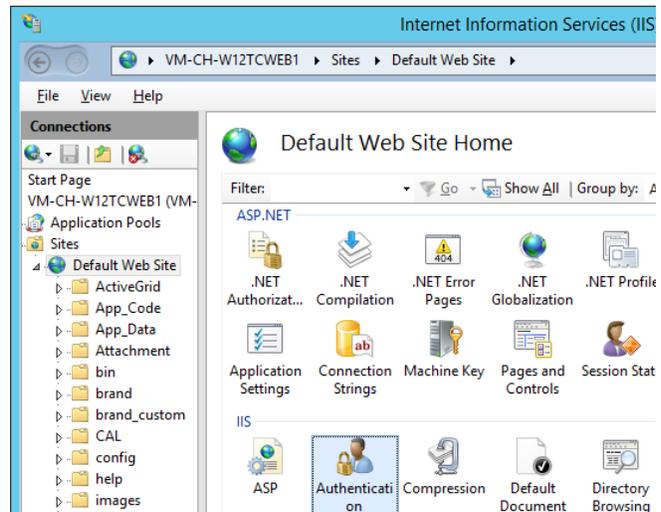
There are two ways of logging in to TCOSS: both domain and user name will be used, or only the user name.

Value Name	Description and Allowable Values	Type	Default
------------	----------------------------------	------	---------

AutoLogon	Autologon for the users 0... Disabled 1... Enabled	DWORD	0
AutoLogonUser- WithDomain	Defines which user name will be used for mapping Windows user to KCS user 0... USER_name. For example, If you logged in domain KCS with user user01, the user user01 will be used to login to TC/Web. 1... DOMAIN_nameUSER_name. For example, if you logged in domain KCS with user user01, the user KCSuser01 will be used to login to TC/Web. For security reasons, NONE of the two options above should be used with KCS 10.0.1 or later 2... username@domainname. For example, if you logged in domain KCS with user user01, the user user01@KCS.com will be used for login into TC/Web. This is the recommended autologon option with KCS 10.0.1 or later	DWORD	1

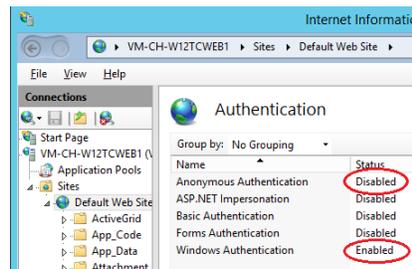
The KCS user must have the LAN login right enabled.

Using the IIS Manager, select “Default Web Site” and double click the Authentication icon:



Picture 66: Disable anonymous access on IIS I.

Disable Anonymous Authentication.
Enable Windows Authentication:



Picture 67: Disable anonymous access on IIS II.

4.48 Auto Time Zone Feature

With installation at large enterprises where users are located in different time zones, it is often required that users have their own time zone on the sent fax cover and headerline. Further, those users also expect to see their own local time if they open the Inbox, Outbox or Archive, and not the local time of the KCS Server, which may be located in a different time zone.

In order to make this happen, the automatic time zone support must be properly configured throughout the KCS system, please refer to the KCS Core and TC/LINK-SM documentation.

For TC/Web, following configuration steps are necessary:

- Manually create registry value AutoTimeZone and set to value 1
- Restart the IIS with the command iisreset to activate the this change

Value Name	Description and Allowed Values	Type	Default
HKLM\Software\TOPCALL\TCWeb\TCSI\AutoTimeZone	AutoTimeZone 0... Disabled 1... Enabled	DWORD	0

Please see chapter Restrictions for any restrictions for Auto Time Zone support in the TC/Web.

4.49 Confirmation of Sent Messages

Sometimes it is necessary to prove that a message has already been sent. To facilitate this, TC/Web can send confirmation messages that include original message content as well as information about the original send order. Users can also preview the message before sending.

This feature is primarily focused on confirming fax messages. Other message types can be resent as well, but previewing might not work. Also, some configuration options might be only relevant for fax messages.

4.49.1 Registry

This feature is configured via the following registry keys under HKLM\Software\TOPCALL\TCWEB\:

Value Name	Description and Allowed Values	Type	Default
SendConfEnable	Enabling/disabling feature 0... Disabled 1... Enabled (Send Confirmation button and action added to TC/Web user interface)	DWORD	0
SendConfHeaderExpr	Specifies a VB Script expression used to generate the text for the message header. If the result of the expression is an empty string or no expression is specified, no header will be generated.	String	""
SendConfFooterExpr	Specifies a VB Script expression used to generate the text for the message footer. If the result of the expression is an empty string or no expression is specified, no footer will be generated. SendConfHeaderExpr and SendConfFooterExpr are visible in both the text and image preview. These type of banners are best suited for email messages.	String	""
SendConfCoverExpr	Specifies a VB Script expression used to generate the text for the image overlay of every page of the message. If the result of the expression is an empty string or no expression is specified, no page overlay will be generated. The page overlay is only visible in the image preview. This is the banner best used for fax messages.	String	""
SendConfHLNExpr	Specifies a VB Script expression used to override the text for the fax header line of the message. If the result of the expression is an empty string or no expression is specified, the default fax header line as specified in the fax channel will	String	""

	be used. The header line is visible neither in the text preview not in the image preview. It is only visible in the resulting fax message.		
SendConfSubjectExpr	Specifies a VB Script expression used to generate the text for the message subject. If the result of the expression is an empty string or not expression is specified, no subject will be generated.	String	""

4.49.2 Template Expressions

The template expressions are used to create strings which should appear as message subject or banners of the delivery confirmation message. They are simple VB Script expressions and may access a number of internal variables and functions.

VB Script allows flexible generation of strings without the need for a custom template syntax.

The expression has to be one contiguous line. No line breaks or other control characters are allowed.

Following variables can be used in an expression:

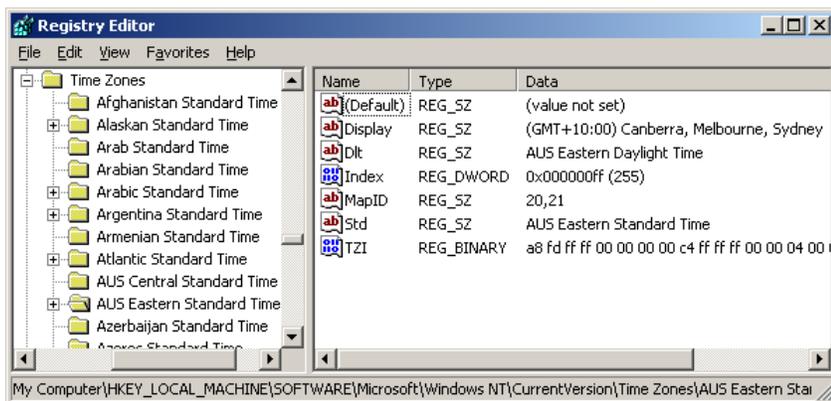
msgId	Message ID
msgStatusFull	Numerical status (refer to TCSI - INT_STATE)
msgStatusText	Language dependent description derived from msgStatusFull
msgTimeActionSys	Time of last message action (for sent messages the sending time) in TFC format ("YYMMDD:hhmmss")
msgTimeAction	Time of last message action formatted according to TC/Web settings.
msgSubject	Original message subject
msgPages	Original number of pages
msgMDANote	Response of the message delivery agent (refer to TCSI – TS_LAST_MDA_NOTE)
msgMDAAction	Action of the message delivery agent (refer to TCSI – TS_LAST_MDA_ACTION)
msgMDAActionText	Language dependent description derived from msgMDAAction
msgRecGroup	Recipient group for the original message, usually "F" for FAX recipients (refer to TCSI – TS_RECIPIENT_GROUP)
msgOriGroup	Originator group for the original message (refer to TCSI – TS_ORIGINATOR_GROUP)
msgStatusSimple	Numerical value: 0 ... Pending, 1 ... Sent OK, -1 ... Error
msgFAXService	Name of FAX service according to TC/Web configuration.
msgDateFmt	Date/Time format string according to TC/Web configuration.
msgIsFAXout	Boolean TRUE if the recipient group is msgFAXService.
msgIsFAXin	Boolean TRUE if the originator group is msgFAXService.
msgIsFAX	Boolean TRUE if either recipient or originator group is msgFAXService.
msgNormalizedTo	The recipient address in normalized format (refer to TCSI – TS_NORMALIZED_ADDR)
msgNormalizedFrom	The originator address in normalized format (refer to TCSI – TS_NORMALIZED_ORIG)
msgServiceTo	The service of the recipient (refer to TCSI – TS_RECIPIENT_SERVICE)
msgServiceFrom	The service of the originator (refer to TCSI – TS_ORIGINATOR_SERVICE)
msgFAXTo	Valid for fax out only, contains the fax number of the recipient
msgFAXFrom	Valid for fax out only, contains the own fax number as reported by the fax server
msgFAXService	The name of the service used for outgoing FAX messages, as configured with the registry (refer to registry value "FaxService")
msgName	Name of the message (refer to TCSI – TS_ENV_NAME_POSTED)
msgNodes	Nodelist of message (refer to TCSI – TS_NODELIST)
msgEntryNode	Character representing the message entry node.
msgExitNode	Character representing the message exit node.
msgFAXTo	fax number part of the normalized recipient address.
msgFAXFrom	fax number part of the normalized originator address.

Following TC/Web specific functions can be used:

strFormatTFCDate (strFormat, strDateTime)	Reformats the date/time string in TFC format according to the format specified.
strAdjustTimeZone (strDateTime, strFromNode, strToNode, aTimeZones)	Converts the specified date/time from one time zone into another. The time zones are specified as array of time zone names (one for each node) and the from/to nodes are used to lookup the correct time zone in this array. The source and result date/time is in TFC format.

The time zone names are strings used as registry sub-keys from location:

HKLM\Software\Microsoft\WindowsNT\CurrentVersion\Time Zones



4.49.3 Example Configuration

The following configuration is a real life example used to send confirmations for fax messages. The system is distributed over 3 locations and interconnected via LCR. The date/time visible in the status banner has to be the time zone of the exit server independent of the location the send order is being displayed. The status banner has to be displayed as image overlay at the bottom of every fax page. The default subject is the original subject prefixed by the message name.

Windows Registry Editor Version 5.00

```
[HKEY_LOCAL_MACHINE\SOFTWARE\TOPCALL\TCWEB]
"SendConfEnable"=dword:00000001
"SendConfCoverExpr"="iif ( msgIsFAX, string( 65, vbCr ) & vbCr & \"Resent Message: \" &
msgName & \" To: \" & msgFAXTo & \" From: \" & msgFAXFrom & vbCr & \"Status: \" & iif(
msgStatusSimple > 0, \"Sent OK\", msgStatusText) & \" Date: \" & strFormatTFCDate (
msgDateTimeFmt, strAdjustTimeZone( msgTimeActionSys, \"B\", msgExitNode, array(\"AUS Eastern
Standard Time\", \"GMT Standard Time\", \"GMT Standard Time\" ) ), \"\") \"
"SendConfSubjectExpr"="iif( left(msgSubject,len(msgName)) = msgName, msgSubject, msgName &
\": \" & msgSubject) "
```

4.50 Other Components

4.50.1 Registry Paths

Almost all TC/Web Access Registry values are fetched from

HKKEY_LOCAL_MACHINE\SOFTWARE\Topcall\TCWeb\

For voicemail player:

...\SOFTWARE\TOPCALL\TCWEB\TCRT\

(for details see chapter Voicemail Player Registry Keys)

For TCSI:

all TCSI parameters including TCSI Trace level, which is read from

...\SOFTWARE\TOPCALL\TCWEB\TCSI\DebugLevel

For TFC:

TFC trace level is read from

```
...\SOFTWARE\TOPCALL\TCWEB\TCSEI\DebugLevel
```

For TCTI:

all TCTI parameters (including TCTI Trace level)

```
HKEY_LOCAL_MACHINE\SOFTWARE\TOPCALL\TCWEB\TCTI
```

(Although it is not recommended to use it, TCSI and TCTI also search the registry path HKEY_CURRENT_USER before looking into HKEY_LOCAL_MACHINE)

For TC/Web trace file handling:

```
HKEY_LOCAL_MACHINE\SOFTWARE\TOPCALL\TCWEB\MaxTraceFiles
HKEY_LOCAL_MACHINE\SOFTWARE\TOPCALL\TCWEB\MaxTraceFileSize
HKEY_LOCAL_MACHINE\SOFTWARE\TOPCALL\TCWEB\AppendTrace
HKEY_LOCAL_MACHINE\SOFTWARE\TOPCALL\TCWEB\TraceToFile
HKEY_LOCAL_MACHINE\SOFTWARE\TOPCALL\TCWEB\TraceFile
```

The name of the application is used to generate the name of the trace file. This results in trace file names such as: tcweb0.trc, tcweb1.trc, etc.

The trace files are saved in directory C:\TCOSS\Trace. Please see the TCLIB Manual for details.

Note: The Windows account under which the TC/Web is running (by default Network Service) must have the write access to the registry hive TCWEB so that the multiple trace files could be generated. If this is not the case, only one trace file tcweb0.trc would be created !

4.50.2 VoiceMail Player Registry Keys

TC/Web Setup creates the following necessary registry keys:

```
...\SOFTWARE\TOPCALL\TCWEB\TCRT\EnginePath="C:\TOPCALL\SHARED\ENGINES\"
```

Please see the TCRT Manual for details.

4.50.3 TCARCH Registry Keys

Normally, unsuccessful send attempts and user-defined log entries are not archived. The archiving of all send attempts and user-defined log entries is enabled using the registry value

```
HKEY_LOCAL_MACHINE\SOFTWARE\TOPCALL\TCARCH\SelectiveArchiving\FolderType
```

Possible FolderType values:

- 0x7 ... regular in- and out-folder only (default value)
- 0x17 ... with all send attempts
- 0x27 ... with user-defined log entries
- 0x37 ... with send attempts and log entries

Please see the Archive Manual for details.

4.50.4 TFC Registry Keys

It is strongly recommended to configure the mapping of as many MimeTypes in the TFC subkey "MimeTypes" as possible.

Please see the TFC Reference Manual section "Mapping of MimeTypes" for further instructions.

4.50.5 TC/Broadcast and OCR Cover Sheets

If you are working with "TC/Broadcast" and are also using the "Download of FAX OCR Cover Sheets" – feature, the following registry keys should be used:

OcrCoverDelay	Delay measured in seconds expected from the computer where "TCMFFormsGen" is running to create the PDF – file of your FAX Ocr Cover Sheets
OcrCoverRequestDir	Directory or network share of the "TCMFFormsGen" - computer where the IIS should send its requests
OcrCoverResponseDir	Directory or network share of the "TCMFFormsGen" - computer where the IIS expects the generated PDF – files

OcrPDFCopyTime	Delay measured in seconds for a file transfer of the PDF – files from the “TCMFFormsGen” – computer to the download directory of the IIS – computer
----------------	---

4.50.6 TC/Broadcast PIN Code

This feature requires the right to send broadcast jobs.

TC/Broadcast Situation

TC/Broadcast can send a job in response to an inbound fax or an email specifying a user name. Since a user name can be a pure numeric value, it is possible that a user accidentally types in the wrong user name. In this case, a broadcast might be sent out to the wrong list.

Also, if a user knows another user’s user ID, a broadcast might be sent to the list of another user.

With the Broadcast PIN enhancement, TC/Broadcast can now be configured so that a user must also specify a PIN code in order to submit a broadcast job.

TC/Web

The feature displays a new text entry field in the user’s Identity tool which holds the user’s broadcast PIN. An administrative user can also view and edit the PIN of another user either via “User Switching” or by using the Users tool.

When a job is sent with TC/Web, the user’s PIN is appended to the job.

With the following registry key TC/Web can be configured to use the broadcast PIN:

Value Name	Description and Allowed Values	Type	Default
SendBroadcastPin	Defines whether PIN data is included in sent jobs and is displayed in the User Identity tool 0... No 1... Yes	DWORD	0

4.50.7 TC/Metamail Registry Keys

MetamailClient	Set to 1 if used TC/Web is to be used as a metamail client
MetamailLatestDelTime	If metamail is configured to “SearchInOutBox” in TCA2Url, this registry value can be used to define the time range in seconds in which the metamail message is searched. If this registry key contains ‘0’ then default times will be used for searching: Inbox, Outbox – 10 sec Short-term archive – 60 sec Archive – 3600 sec
MetamailHideButtons	1... Buttons in header of metamail windows are not displayed 0... Buttons are displayed
MetamailSuperuser HideActionButtons	If set to 1, and a user is logged in as SuperUser for metamail, the Reply, Reply All and Forward buttons will not be available in the metamail message header
SuperUser	User name of user on KCS system which will be used for Metamail
SuperInternal	Password of user specified in key “SuperUser”

If SuperUser is defined, then it will be used for login to TCROSS and displaying a message to a user. If it is not defined, then user name and password will be asked. SuperUser must have sufficient rights to display the message (List and Open Inbox, Outbox for all users) and Inbox & Outbox tools must be enabled for this user.

Note on MetamailLatestDelTime:

With this registry value you can configure the time range in seconds within which the metamail message should be searched. This feature will be necessary if metamail is configured with ‘SearchInOutbox’ (see TCA2Url Manual). In this case, this value is used to define the time range in which the metamail message should be searched. (When a message is sent out, and if TC/Web is configured to wait for a read notification, TIME_ACTION will be set as soon as the read notification has arrived. Due to this fact, a possibility to define the time range is needed.)

If set to 0, the time range definition will be disabled and the standard time ranges will be used (10 sec for Inbox, Outbox; 60 sec for Short-term archive; 3600 sec for Archive)

4.50.8 Location Based Routing for Outbound Voice Calls

It is possible to control which LS1 (=TCECP instance) is used for outbound voice calls by TC/Web's player. TC/Web uses the "Location" entry specified in the user profile. Location based voice servers can be specified by creating a registry key with a name equal to the location under TCWEB\ServerVoiceLocation\ registry key.

Example:

ServerVoiceLocation\Vienna	Voice_Server_Vienna_ID	STRING
ServerVoiceLocation\Berlin	Voice_Server_Berlin_ID	STRING

By default, the voice server from the ServerIdVoice registry key will be used.

Note: The location can consist of no more than eight characters.

4.50.9 Voice Settings Configuration Registry Keys

4.50.9.1 Configuring Access to System Greetings

SuperInternalVoice	Password of the user to be used to access the TCVMail user profile for Voice Configuration.	STRING	[blank]
SuperUserVoice	ID of the user to be used to access the TCVMail user profile for Voice configuration.	STRING	[blank]
VoiceSystemUser	User ID of the user where the System Voice Greetings are stored.	STRING	TCVMail

A user can configure their Voice Greetings in TC/Web. A user has access to two kinds of greetings:

- Normal greetings are stored in the user's own user profile.
- System greetings are stored in the user profile of the TCVMail VoiceSystemUser, which is normally the user TCVMail.

To enable a regular user with no rights to access other user's profiles to be able to view the system greetings, TC/Web automatically connects as a different user (SuperUserVoice) with rights to read the TCVMail user profiles. The login information for this user is stored in the registry keys SuperUserVoice and SuperInternalVoice.

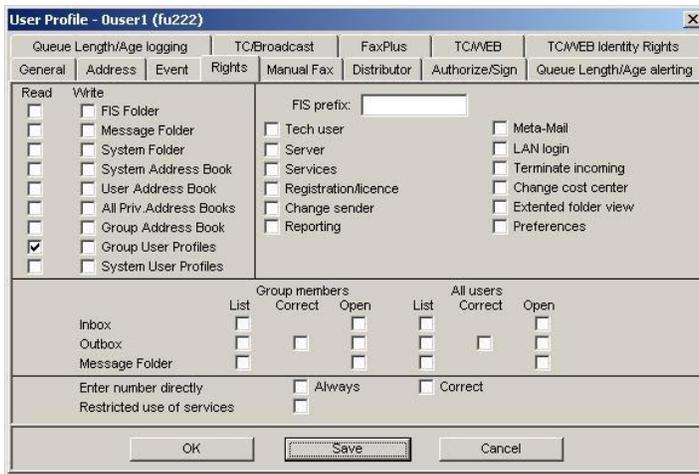
- SuperUserVoice is the User ID of that user.
- SuperInternalVoice is the password of that user.

Either the login credentials of the TCVMail user can be used here, or a new user can be created with access to the TCVMail user profile, as described below.

Note that there is no security risk because the user is always logged in with his/her own credentials. TC/Web only uses the SuperUserVoice user to open specific data from the TCVMail user.

Typically, the user profile where the system greetings are stored has the ID "TCVMail". If the user has a different name, this can be configured with the VoiceSystemUser registry key.

To minimize security risk, it is recommended not to use the TCVMail user as SuperUserVoice. You must create a new user in the same group as VoiceSystemUser and grant him the right to read group user profiles. No other rights are needed for this user.



Picture 68: User Profile – Rights tab

4.50.9.2 Defining the Default Times for a User Viewing a Schedule

DisplayVoiceScheduleStart	Specifies the first hour that is displayed by default on the Voice Greeting Schedule. Possible values: 0 - 23	DWORD	6
DisplayVoiceScheduleEnd	Specifies the last hour that is displayed by default on the Voice Greeting Schedule. Possible values: 0 - 23	DWORD	20

These two registry keys determine the start and end hours of the “Edit Schedule” display in TC/Web. On that screen, a user can also change the start and end times. If they do, the new times will be stored in their user profile and these new times will be used instead of reading these registry values.

4.50.9.3 Defining the Timeouts for Recording of Voice Messages and Greetings

VoiceRecordTMOIdle	Maximum allowed silence time prior to stopping the recording of the voice message in seconds, by default this registry value is not created and it is set to 10 seconds	STRING	TCVMail
VoiceRecordTMOLength	Maximum recording time of a voice message in seconds, by default this registry value is not created and it is set to 120 seconds	STRING	TCVMail

These two registry keys determine the maximum length and silence timeout for recording of a new voice message or greeting.

In order to change default values, corresponding registry values must be created manually and Internet Information Server must be restarted afterwards (iisreset command).

4.50.9.4 Enabling the Enhanced Voice Password Check

VoiceEnhancedPwdCheck	Enables enhanced voice password check function (1-enabled, 0-disabled)	DWORD	1
VoicePwdMin	Minimum required voice password length	DWORD	2
VoicePwdMax	Maximum allowed voice password length	DWORD	4

These three registry keys determine the voice password check policy and its maximum and minimum allowed length.

Note that the enhanced voice password check is by default enabled. In order to change default values (or disable the enhanced password check), change corresponding registry values and restart Internet Information Server afterwards (iisreset command).

4.50.10 ASP Installation

In an ASP (Application Service Provider) installation, one TC/Web application provides access to multiple TCOSS server instances.

The registry key that instructs TC/Web to access multiple servers is “BrowseForTCPPath”.

- 1 ... Use multiple servers.
- 0 ... Use one server.

If TC/Web is set to use multiple servers, the login screen will display an additional field: Customer. In order to locate which server a particular user is located on, TC/Web needs both the Username and Customer of a user.

TC/Route and TCInst

In a standard TC/Web installation, the TCROSS server to be used is specified in the registry keys. But in an ASP system each user that logs in is connected to their TCROSS server based on their login information: UserID and CustomerID. TC/Web locates the proper server for the user through the use of a database, called the routing database, which stores which user is located on which server.

Note: The following is a brief description of TCROUTE and TCINST. For detailed and up-to-date information, please refer to the TC/Broadcast manual.

The data in the routing database is automatically updated by a KCS process called TCROUTE.

If TC/Web is configured to connect to multiple servers, ONLY users in the routing database will be able to log in to TC/Web. Users must have certain rights to be added to the TC/Route database. Please see the “Rights to Login on ASP System” section for details.

TC/Web accesses the data in the routing database via KCS software called TCINST. The TCINST DLL must be installed on the TC/Web server. TCINST is installed by the setup script during TC/Broadcast installation. The registry for TCINST must be configured to point to the routing database and to the directory for the local XML cache files. These local XML cache files are stored on the web server and hold information from the routing database. TCINST handles the creation of and access to the XML cache files. (Cache files update is triggered when a user tries to log in via TC/Web and the registry value BrowseForTCPPath is set to “1”.)

4.51 Cookie Settings

For additional security, TC/Web cookies can be configured to use HttpOnly and Secure attributes.

The Secure attribute is meant to keep cookie communication limited to encrypted transmission, directing browsers to use cookies only via secure/encrypted connections. In TC/Web, you can control this cookie attribute using the registry value CookieSecureFlagEnable. The default value is 1 – enabled.

The HttpOnly attribute directs browsers not to expose cookies through channels other than HTTP (and HTTPS) requests. In TC/Web, you can control this cookie attribute using the registry value CookieHttpOnlyFlagEnable. The default value is 0 – disabled.

Note: If HttpOnly is enforced (CookieHttpOnlyFlagEnable=1), Java-based Tiffy viewer does not work (Java applet cannot access the cookies). In this case, it is recommended to use PDF viewer for opening messages in Image view – set FaxAttachmentImageFormatView to 7.

4.51.1 Cookies Scoping to Subdomains

Cookies can also be scoped to subdomains using the registry value CookieDomainName. This value contains the subdomain to which the cookies should be scoped. Make sure to run the application by giving the fully qualified domain name (FQDN) of the computer.

TC/Web runs correctly when the domain/subdomain set in the CookieDomainName is the part of the FQDN of the computer name.

4.51.2 Cookie Scoping to Path

For additional security, along with the cookie scoping to subdomains, the CookiePathName registry key can be used for cookie scoping to path. This key contains the path for which the cookies should be scoped. The cookies are only scoped to the applications for which the subdomain and path matches with values configured in CookieDomainName and CookiePathName.

For example, if the CookieDomainName key is set to "mytest.com" and CookiePathName key is set to "/tcweb", then the cookies are only scoped within the "mytest.com" domain for the application having "tcweb" name or any of its sub-folders as shown in the following table.

URL	Cookie Scoped
mytest.com/tcweb	Yes
app.mytest.com/tcweb	Yes
app.mytest.com/xyz	No
mytest.com	No

By default, the value of CookiePathName key is set to "/".

Note: After updating the CookiePathName key value, please delete the existing cookies.

4.52 Customizable Buttons

All buttons displayed for particular tool are configurable through TC/Web's config.xml file by adding <button/> and <contextbutton/> elements to the <buttons/> container of that tool. But, for each newly added button in this way, code changes in TC/Web are also necessary.

The config.xml file is located in the TC/Web root directory (by default, c:\tcoss\tcweb).

TC/Web now support two new types of buttons, which are configurable in config.xml without any further changes in TC/Web:

<buttonopt/>	Adds a button to the top of the tool. Its function is restricted to send a web request to the configured web server (without the possibility of any additional query parameters)
<contextbuttonopt/>	Adds a button to the Action context menu with the same function, but with the possibility to add some message related properties as query parameters to the web request

Syntax definition ([] denotes variable parameter):

```
<buttonopt id="[ButtonID]" text="[ButtonDisplayName]"
cond="[UserProfileItem]=[RegularExpression]" url="[ServerUrl]" target="[target]" />

<contextbuttonopt id="[ButtonID]" type="[ButtonType]" text="[ButtonDisplayName]"
cond="[UserProfileItem]=[RegularExpression]" url="[ServerUrl]" target="[target]">
  <condvalue mask="[Mask]">[FieldID1]=[RegularExpression1]</condvalue>
  <condvalue mask="[Mask]">[FieldID2]=[RegularExpression2]</condvalue>
  ...
  <queryparam Name="[QueryParamName1]" fldid="[FieldName1]" />
  <queryparam Name="[QueryParamName2]" fldid="[FieldName2]" />
  ...
</contextbuttonopt>
```

List of parameters:

id="[ButtonID]"	Unique Id of the button, for example 1, 2, 3 ...
Type="[ButtonType]"	If type="button" - this button is the optional customizable button in message window. If type="menu" - this button is the optional customizable button in context menu.
text="[ButtonDisplayName]"	The button text displayed
cond="[UserProfileItem]=[RegularExpression]"	The condition for the button to be displayed only if configured item of the user profile matches given regular expression:

	<p>User profile properties which are physically stored in the user store like userID or group, must be accessed through a dedicated prefix "USER." followed by the TCSI property name, for example:</p> <p style="text-align: center;">USER.TS_USER_ID USER.TS_GROUP</p> <p>Those user properties, which are stored in the related user's recipient (recipient store) are accessed directly through their TCSI property name, for example:</p> <p style="text-align: center;">TS_DEPT TS_COMPANY TS_FULLNAME</p> <p>By default, the regular expression search is case sensitive. If necessary, the case insensitivity may be activated by using regex mode modifier (?i)</p>
url="[ServerUrl]"	The Url of the web server to be called
target="[target]"	The target to load the url to, there are following options: _blank - display an a new window _parent - display in the parent frame
Condvalue	Defines condition some fields of the grid's row where the button has been clicked must fulfill. If more than one condvalue elements are present, all of them must be fulfilled for the button to be shown. If there is no condvalue element, the button is always displayed (assuming the cond attribute is fulfilled)
Mask	Defines relevant bits in the INT_ANNOTATIONS used

```
<queryparam Name="[QueryParamName]" fldid="[FieldName]" />
```

The list of message properties to be added as query parameters to the url:

fldid="[FieldName]"	<p>The name of the field to be used. It can be any of the fields which are configured for the particular tool with the attributes enable=true and show=1. For example, FLD_MSG_ID, FLD_SUBJECT.</p> <p>In addition, the built in field name FLD_MSG_INFO (for details see below) can be used even though it is not configurable among the tool fields.</p>
Name="[QueryParamName]"	The name of the corresponding query parameter used for this field

Definition of the FLD_MSG_INFO parameter:

```
[tfcPath] | [MessageID] | [Recipient] | [Originator] | [CurrentUserID]
```

For example, outgoing fax sent via tcross channel 61 from user Ringo Stark, logged in user John Lennon:

```
\mail\407604\767\12598\65568\TCTECH\140402:140412\50\16584\2|0006383327F88D92|61|Ringo Star|John Lennon
```

Configuration examples (config.xml):

The user "Administrator" can see the "Kofax Home Page" button in his outbox and all users with the company "Kofax" will see the Action context button "Custom Button" in their outboxes:

©Kofax

```
<tool id="APP_OUTBOX" variable="OutboxShow">
...
<buttons>

    <buttonopt id="1" text="Kofax Home Page" cond="USER.TS_USER_ID=Administrator"
url="http://www.kofax.com" target="_blank" />
    <contextbuttonopt id="1" type="[ButtonType]" text="Custom Button"
cond="TS_COMPANY=\bKofax\b" url="http://www.mycompany.com" target="_blank">
        <queryparam Name="subject" fldid="FLD_SUBJECT" />
        <queryparam Name="tfcPath" fldid="FLD_MSG_INFO" />
    </contextbuttonopt>
</buttons>
```

Restriction:

The customizable buttons are not supported for switched users

4.52.1 Customizable Resubmit Button

Earlier, the optional custom buttons were configured only for context menus. Now, it is also configurable in message window. This can be done using the config.xml (by default, this file is located in c:\tcoss\tcweb).

Optional context buttons should be in the following format, for example:

```
-----
<contextbuttonopt id="[ButtonID]" type="[ButtonType]" text="[ButtonDisplayName]"
cond="[UserProfileItem]=[RegularExpression]" url="[ServerUrl]" target="[target]">
    <queryparam name="[QueryParamName1]" fldid="[FieldName1]" />
    <queryparam name="[QueryParamName2]" fldid="[FieldName2]" />
    ...
</contextbuttonopt>
```

Additionally, there is a new attribute "type". Where,

if type="button" - this button is the optional customizable button in message window.

if type="menu" - this button is the optional customizable button in context menu.

4.52.2 Annotations Buttons

New column "Annotation" has been added to the outbox tool. This can be configured using the config.xml (by default, this file is located in c:\tcoss\tcweb).

The annotation feature allows a user to assign additional states/annotations to the terminated outgoing messages. This feature can use up to 32 binary bits in the INT_ANNOTATIONS field of a terminated outgoing message. Additionally, it is possible to restrict to number of bits in INT_ANNOTATIONS field to be used. For example, if there are only two states to be defined, only one bit of information is required. If there are up to four different states, two bits would be needed and so forth. Mask is used to define the relevant bit range in INT_ANNOTATIONS. Mask=3 stands for two LSB bits, mask=6 stands for bit 1 and bit 2 (in this case, bit 0 is the LSB bit and would not be used). In case mask defines some higher bits (such as mask=6), the annotation values are automatically shifted to left to the proper position before saving to the INT_ANNOTATIONS field.

Syntax definition ([] denotes variable parameter):

```
<tool id="APP_OUTBOX" variable="OutboxShow">
...
<field id="FLD_ANNOTATIONS" enabled="true" registry="Outbox\Annotations\" show="0"
populateorigdata="true"
width="30%" order="240" desc="@STR_FIELD_ANNOTATION" orient="left"
filterable="1" >
    <annotations mask="[Mask]">
        <annotation value="[Value1]" desc="@STR_ANNOTATION1"/>
```

```

        <annotation value="[Value2]" desc="[@STR_ANNOTATION2]"/>
        <annotation value="[Value3]" desc="[@STR_ANNOTATION3]"/>
    </annotations>
</field>
...
</tool>

```

List of Parameters

Mask	Defines the relevant bit range in the INT_ANNOTATIONS used (integer.) For example, mask=3 stands for two LSB bits, mask=6 would stand for bits 1 and 2 (bit 0 is the LSB bit and would not be used in this case). The mask should always define consecutive bits like 3 (11 binary), 6 (110 binary) and so on.
ValueX ... @STR_ANNOTATIONX	The value attribute (integer) and the desc attribute in the annotation element define a pair of annotation "state" written to INT_ANNOTATIONS and its representation on the UI. If the desc attribute has the form "@CONSTANT", then the text is taken from the language file, where eight default constants STR_ANNOTATION1 up to STR_ANNOTATION8 are pre-defined (STR_ANNOTATIONx is the integer constant defined in TC/Web's IncConst.vb file.) If the desc attribute does not start with the '@' character, attribute's value is considered as a text for the UI.

Example:

In the following three context buttons are defined which would be displayed to the user TCTECH and would conditionally set all three annotation states 0, 1 or 2 (for example, if current annotation is 0, only annotation values 1 and 2 could be set and so forth). Annotation buttons should be in the following format:

```

<tool id="APP_OUTBOX" variable="OutboxShow">
...
<field id="FLD_ANNOTATIONS" enabled="true" registry="Outbox\Annotations\" show="0"
populateorigdata="true"
    width="30%" order="240" desc="@STR_FIELD_ANNOTATION" orient="left"
filterable="1" >
    <annotations mask="3">
        <annotation value="0" desc="@STR_ANNOTATION1"/>
        <annotation value="1" desc="@STR_ANNOTATION2"/>
        <annotation value="2" desc="@STR_ANNOTATION3"/>
    </annotations>
</field>
...
</tool>

<contextbuttonopt id="1" cond="USER.TS_USER_ID=TCTECH" text="SetAnnotation1"
url="Actions.aspx?ActionType=36&anotmask=3&anotvalue=0" target="FrameAction">
    <condvalue mask="3">FLD_ANNOTATIONS_VALUE=1|2</condvalue>
    <queryparam name="FilePath" fldid="FLD_MSG_INFO" />
    <queryparam name="RequiredOldValue" fldid="FLD_ANNOTATIONS_VALUE" />
</contextbuttonopt>
<contextbuttonopt id="2" cond="USER.TS_USER_ID=TCTECH" text="SetAnnotation2"
url="Actions.aspx?ActionType=36&anotmask=3&anotvalue=1" target="FrameAction">
    <condvalue mask="3">FLD_ANNOTATIONS_VALUE=0|2</condvalue>
    <queryparam name="FilePath" fldid="FLD_MSG_INFO" />
    <queryparam name="RequiredOldValue" fldid="FLD_ANNOTATIONS_VALUE" />
</contextbuttonopt>
<contextbuttonopt id="3" cond="USER.TS_USER_ID=TCTECH" text="SetAnnotation3"
url="Actions.aspx?ActionType=36&anotmask=3&anotvalue=2" target="FrameAction">
    <condvalue mask="3">FLD_ANNOTATIONS_VALUE=0|1</condvalue>
    <queryparam name="FilePath" fldid="FLD_MSG_INFO" />
    <queryparam name="RequiredOldValue" fldid="FLD_ANNOTATIONS_VALUE" />
</contextbuttonopt>

```

5. USER ADMINISTRATION

User administration with TC/Web includes the following possibilities:

- Creating a new user
- Creating a new template-based user
- Editing basic properties such as name, group, cost center, language
- Changing the addresses of a user via editing the user's recipient entry
- Changing the In-events of a user
- Changing the rights of a user
- Changing a user's password
- Locking and unlocking user accounts

To fully administer users, however, TCfW client application must be used, and it is required also for the following aspects of user administration.

If you are using both TC/Web and TCfW for changing user profiles, both clients must belong to the same KCS version. Once a user profile is saved with a newer version, older client cannot save it correctly anymore.

5.1 Creating and Configuring Users

Users are either created with the User Profile tool in TCfW or with the User List in TC/Web (See "TC/Web User manual" on how to create new users within TC/Web).

5.1.1 TC/WEB Tab

The TC/WEB tab of the User Profile tool is used to define which tools a user has access to in TC/Web.

The state of each tool's checkbox controls a user's access to the tool:

- Checked makes the tool available.
- Unchecked makes the tool unavailable.
- Grey forces TC/Web to use the system default.

TC/Web uses the tool's "Show" registry value to determine whether the tool should be available or not.

Note: The user must also have the proper user rights for the tool to be available.

5.1.2 TC/WEB Identity Rights Tab

The TC/WEB Identity Rights tab of the User Profile tool is used to define which fields a user can view and edit in their Options>Identity tool in TC/Web.

For an end user, only the checkboxes of the User Read and User Write columns are important.

A check in the User Read column makes the field visible to the user.

A check in the User Write column makes the field editable for the user.

5.1.3 Necessary Rights for Each Tool

This table indicates which User Profile rights are necessary for each tool to be visible to a user. A "-" indicates that no special rights are necessary.

TOOL	TC/WEB Tab	Additional Rights
New Message	Compose Message	-
New Job	Compose Job	TC/Broadcast> User can send job
Recipients - personal	Distribution List Maintenance	Rights>User Address Book /Read
Recipients - group	Distribution List Maintenance	Rights>Group Address Book /Read
Recipients - system	Distribution List Maintenance	Rights>System Address Book /Read
Distribution Lists -personal	Distribution List Maintenance	Rights>User Address Book /Read
Distribution Lists -group	Distribution List Maintenance	Rights>Group Address Book /Read
Distribution Lists -system	Distribution List Maintenance	Rights>System Address Book /Read

User Extensions	-	FaxPlus> Enable administration of faxplus group members & Rights>Group Address Book /Write Rights>System Address Book /Write Rights>Group User Profile /Read Rights>System User Profile /Read
Messages	-	-
Inbox	Inbox	-
Outbox	Outbox	-
Archive	Archive	-
Public	Public Folder	Rights> FIS Folder /Read
Private	Private Folder	Rights> Message Folder /Read
System	System Folder	Rights> System Folder /Read
Jobs	Job Monitoring	-
Active Jobs	Job Monitoring	Rights> Outbox/List/ All user (or group)
Problem Job Items	Job Monitoring	TC/WEB> Administer users /All Users (or group)
Completed Jobs	Job Monitoring	Rights> Outbox/List/ All user (or group)
Options	Options	-
Identity	-	-
Change Password	Change Password	-
Settings	Settings	-
Job Notification	Job Status Reports	-
Users	Create User, User List	TC/WEB> Administer users /All Users /Group Users
History for Inbox, Outbox and Archive tools	History	Rights> Inbox/List/group users & Rights> Outbox/List/group users
History for Public, Private and System tools	History	Rights> Inbox/List/All user & Rights> Outbox/List/ All user
Security	-	-
Login/Logout Auditing	Login/Logout Auditing	Rights> Inbox/List/All user & Rights> Outbox/List/ All user

Note: The Job View checkbox controls access to all three Job tools.

5.1.4 Groups and TC/Web

A user's group has several implications in TC/Web.

Every group has its own address book that can store recipients and distribution lists. Only members of this group can be granted access to this group address book.

A user group administrator can only administrate the members of one group.

In an ASP multiple-TCOSS-server environment, all users of one customer belong to the same group. A user enters the group in the CustomerID field at the login screen.

5.1.5 Autologon / LAN Login

If TC/Web is configured for autologon with the "AutoLogon" registry key, users can be configured to be automatically logged in by setting the following checkbox: TCfW> User Profiles> Rights tab> Lan Login checkbox.

Please refer to chapter Configuration->Autologon for details

5.1.6 Rights to Login on ASP System

On a TC/Web ASP system that connects to multiple TCOSS servers, only users with one of the following rights can login:

- Group user administrators
TCfW User Profile> TC/WEB tab > Administer Users= Group Users
- System user administrators
TCfW User Profile> TC/WEB tab > Administer Users= All Users
- TC/Broadcast users
TCfW User Profile> TC/Broadcast tab > User can send jobs
- User extensions users
TCfW User Profile> FaxPlus> Enable administration of Fax Plus Users

5.1.7 History View

5.1.7.1 Requirements

For the History View in the Inbox, Outbox and Archive tools, a user must have the rights Group List Inbox and Outbox to view the History; otherwise the History View button will not be displayed at all.

TCfW > User Profiles> Rights tab>List Inbox of Group Users and List Outbox of Group Users

For the History View in the Public, Private and System folder tools, a user must have the rights List Inbox and Outbox of ALL users to view the History; otherwise the History View button will not be displayed at all.

TCfW > User Profiles> Rights tab>List Inbox of All user and List Outbox of All users

Logging has to be enabled on the archive and in the TCOSS (in the case also server generated entries are desired) so that actions can be shown in the history view.

See TC/Archive manual for details: Normally unsuccessful send attempts and user-defined log entries are not archived. The archiving of all send attempts and user-defined log entries is enabled using the registry.

Note: Due to a problem in the implementation of TC/Web version 4.XX.XX, user-generated log entries (like Displayed, Printed, ...) generated by this version's logs will not be visible in the Inbox, Outbox and Archive tools with Group List Inbox/Outbox rights. In order to see them, List Inbox/Outbox of ALL users right is necessary! However, this restriction does not apply for TC/Web version 5.00.64 or later.

5.1.7.2 TCOSS Configuration

The History View can be configured in the line 21, 1st position of the TCOSS system configuration. The following values may be set (bitwise) for particular message audit log entry:

- 0x01 ... Open
- 0x02 ... Reactivate/PriorityChange/Update
- 0x04 ... Cancel/Reject/Terminate
- 0x08 ... Complete
- 0x10 ... Distribute/Return/Correct

For example, value 0x1F activates message audit logs for all activities above.

Please refer to the TCOSS TAM Manual for details.

5.1.7.3 TC/Archive

An archive must be installed and properly configured for History View to work. Further, archiving of user-defined log entries must be enabled via the registry.

```
HKEY_LOCAL_MACHINE\SOFTWARE\TOPCALL\TCARCH>SelectiveArchiving\FolderType
```

Possible FolderType values are:

- 0x7 ... regular in- and out-folder only (default value)
- 0x17 ... with all send attempts
- 0x27 ... with user-defined log entries
- 0x37 ... with send attempts and log entries

For the history view, the value 0x27 or 0x37 must be chosen.

Note: TCOSS code page and archive code page must match.

Please refer to the TC/Archive Manual for details.

5.1.8 Login/Logout Auditing

5.1.8.1 Requirements

A user must have the rights List Inbox and Outbox for all users to view the login/logout auditing; otherwise the toolbar will not be displayed at all.

TCfW > User Profiles > Rights tab > List Inbox of All user and List Outbox of All users

The LoginLogoutAudit toolbar must be enabled in the registry by setting

```
HKEY_LOCAL_MACHINE\SOFTWARE\TOPCALL\TCWEB\LoginLogoutAudit\Show
```

to "1". The default value is "0" which means that the toolbar is not visible.

5.1.8.2 TCOSS Configuration

As for the Login/Logout Auditing the line 21, 2nd position of the TCOSS system configuration must be set (bitwise):

- 0x01 ... Successful login
- 0x02 ... Failed login
- 0x04 ... Logout
- 0x08 ... Complete
- 0x10 ... Distribute/Return/Correct

For example, value 0x1F activates auditing feature of all activities above. Please refer to the TCOSS System Manual for details.

5.1.8.3 TC/Archive:

An archive must be installed and properly configured for the login/logout auditing to work.

Further, for the login/logout auditing, the archiving of user-defined log entries must be enabled using the registry value

```
HKEY_LOCAL_MACHINE\SOFTWARE\TOPCALL\TCARCH>SelectiveArchiving\FolderType
```

Possible FolderType values are:

- 0x7 ... regular in- and out-folder only (default value)
- 0x17 ... with all send attempts
- 0x27 ... with user-defined log entries
- 0x37 ... with send attempts and log entries

For the login/logout auditing value 0x27 or 0x37 must be chosen.

Note: TCOSS code page and archive code page must match.

Please refer to the TC/Archive Manual for details.

5.1.9 Log Entries

5.1.9.1 Requirements

The admin user must have the rights List Inbox and Outbox for all users to view the Log Entries; otherwise the toolbar will not be displayed at all.

TCfW > User Profiles > Rights tab > List Inbox of All user and List Outbox of All users

The Log Entries option must be enabled in the registry by setting

HKLM\Software\TOPCALL\TCWEB\LogEntries\Show

to 1. The default value is "0" which means that this option is not visible.

The user must also have the TC/Web right "Administer All Users".

5.1.9.2 TCOSS Configuration

As for the Log Entries the line 21, 2nd position of the TCOSS system configuration must be set (bitwise):

- 0x01 ... Successful login
- 0x02 ... Failed login
- 0x04 ... Logout
- 0x08 ... Complete
- 0x10 ... Distribute/Return/Correct

For example, value 0x1F activates auditing feature of all activities above. Please refer to the TCOSS System Manual for details.

To get the logs AUDITADB, AUDITUSR, AUDITSYS, AUDIT, FAX and, TCTECH, configure the line 21 in sysconfig as: FF F7 FF 03, 021.

Following tables describes when each of KCS audit/log entries are logged:

AUDITUSR logs

Logs	Description
RECIPIENT_NEW	When a new recipient is created in TCfW or TC/Web
RECIPIENT_CHANGE	When an existing user is modified in TCfW or TC/Web
USER_DELETE	When an user is deleted in TCfW or TC/Web
EVENT_IN_MAIL	When an 'in' event is created for a user in its user profile in the events tab
EVENT_MWON	When a 'MsgWaitOn' event is created for a user in its user profile in the events tab
EVENT_MWOFF	When a 'MsgWaitOFF' event is created for a user in its user profile in the events tab
EVENT_DEL_NOTIF	When a 'DelNotif' event is created for a user in its user profile in the events tab
EVENT_NON_DEL_NOTIF	When a 'Non-delNotif' event is created for a user in its user profile in the events tab
EVENT_BACK_REC	When a 'sendingcopy' event is created for a user in its user profile in the events tab
EVENT_JOB_START	When a 'JOBSTART' event is created for a user in its user profile in the events tab
EVENT_JOB_END	When a 'JOBEND' event is created for a user in its user profile in the events tab EVENT_JOB_END is created
EVENT_IN_RELEASE	When an 'inbound release' event is created for a user in its user profile in the events tab
EVENT_OUT_RELEASE	When an 'outbound release' event is created for a user in its user profile in the events tab

AUDITLOGS

Logs	Description
LOGIN	When the user logs in
LOGOUT	When the user logs out
LOGIN_FAILED	When the user login fails

AUDITSYS logs are created when the message or attachment is opened or saved respectively. Save, display, save attachment etc. logs are created and can be seen under the action field.

AUDITADB logs

Logs	Description
RECIPIENT_NEW	When the recipient is created
RECIPIENT_CHANGE	When the recipient is deleted
RECIPIENT_DELETE	When the recipient is changed

AUDIT Message_logs

Logs	Description
DISPLAY	When the arrived message is opened by the recipient
SAVE	When the arrived message is saved
PRINT	When the arrived message is printed
ATTACHMENT_OPEN	When the attachment is opened

FAX Logs: To get the fax logs, configure the 1st, 2nd, 3rd position in line 296 of sysconfig: FF 03 FF

Configuration Line 296, 1st position, Type filter for logging entries (incoming calls)

- bit 0: "Fax In"
- bit 1: "Fax Routing"
- bit 2: "Fax Scan"
- bit 3: "Fax Command"
- bit 4: "Fax Command (SR)"
- bit 5: "FIS Command"
- bit 6: "FIS Command (SR)"
- bit 7: "Voice In"

Configuration Line 296, 2nd position, Type filter for logging entries (outgoing calls)

- bit 0: "Fax Out"
- bit 1: "Voice Out"

Configuration Line 296, 3rd position, result filter

- bit 0: "Error"
- bit 1: "No Fax"
- bit 2: "Ok"
- bit 3: "Ok (Tx)"
- bit 4: "Ok (Rx)"
- bits 5-7 are reserved for future result values

5.1.9.3 TC/Archive:

An archive must be installed and properly configured for the login/logout auditing to work.

Further, for the login/logout auditing, the archiving of user-defined log entries must be enabled using the registry value

`HKEY_LOCAL_MACHINE\SOFTWARE\TOPCALL\TCARCH>SelectiveArchiving\FolderType`

Possible FolderType values are:

- 0x7 ... regular in- and out-folder only (default value)

- 0x17 ... with all send attempts
- 0x27 ... with user-defined log entries
- 0x37 ... with send attempts and log entries

For the login/logout auditing value 0x27 or 0x37 must be chosen.

Note: TCOSS code page and archive code page must match.

Please refer to the TC/Archive Manual for details.

5.1.10 Personalized TC/Archive

It is possible to configure TC/Web so that every user has a different archive on TCOSS. TC/Web is able to use different archive instances.

TC/Web determines the archive in the following order:

- Any archive defined for the user in the user profile will be used.
- If the user has the rights to read the group profile and there is an archive defined for group users, this archive will be used.
- In case of a single TCOSS instance (Registry value HKLM\Software\TOPCALL\TCWEB\BrowseForTCPPath = 0), the standard archive configuration from the registry will be used.
- In case of multiple TCOSS instances (Registry value HKLM\Software\TOPCALL\TCWEB\BrowseForTCPPath = 1), the archive supplied by TCROUTE will be used.

The archive configuration can be changed only by users with system administrator rights.

Language:	English
Session timeout:	10 (30 Minute maximum)
ArchiveName:	PC-CHZI-TEST
ArchivePath:	PC-CHZI_TEST:ARCHIVE01

Picture 69: Anonymous User Account

Note: In order to read the archive configuration of a group user, the user must have the rights to read group user profiles. In case of multiple TCOSS instances, the group user must be at the same TCOSS instance as the standard user.

Note: TCOSS code page and archive code page must match.

5.2 Configuring User Administrators

5.2.1 User Administrators

A system user administrator or group user administrator user entry is a normal TC/Web user entry with some additional rights.

A user administrator entry is configured in the TC/WEB and TC/WEB Identity Rights tabs in TCfW.

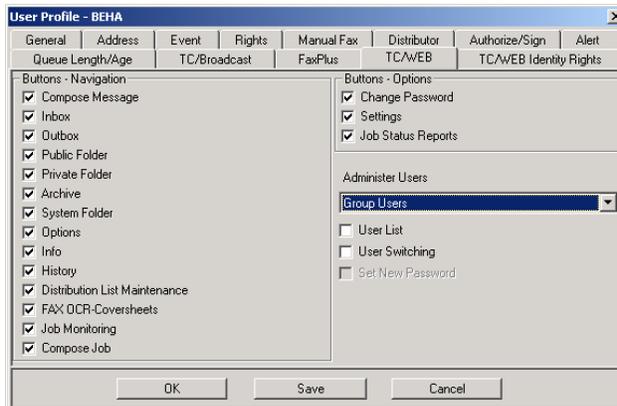
Both of these types of administrative users can view and edit the data of the users they are responsible for in a highly configurable way. They can change the other users' passwords, and they can view and edit their users' addresses, distribution lists, jobs and other settings.

5.2.2 TC/WEB Tab

In the TC/WEB tab the dropdown menu control “Administer Users:” is used to configure user administrators.

The dropdown has three options:

- None – Normal user. No administration features are available.
- Group Users – Group user administrator
- All Users – System user administrator



Picture 70: User Profile - TC/WEB tab

In order for a user administrator to administrate other users, he/she needs to have specific rights set in the TCfW Rights tab in the user profile. The following rights will be set automatically if the “Administer User” selector is set.

System User Administrator:	Group User Administrator:
Group Userprofile (Read & Write)	Group Userprofile (Read)
System Userprofile (Read & Write)	
System Addressbook (Read & Write)	

Once the Administer Users selector has been set to All Users or Group Users, the three checkboxes can then be used to set the administrative capabilities of the user:

- User List - The user can see the Users tool in TC/Web.
- User Switching - The user can impersonate other users.
- Set New Password - The user can change other users’ passwords, without knowing the old one.

For detailed information on these features, please see the User Administration topic in the TC/Web User Manual.

Note: When TC/Broadcast is installed, a system user administrator automatically gains access to the Problem Jobs tool.

Note: The User Profiles Read and Write checkboxes must be checked in the Rights tab to enable the User List and User Switching functionality. (These rights will be set automatically if the Administer Users dropdown is used.)

5.2.3 TC/WEB Identity Rights Tab

For a user administrator, this tab controls the access to the fields in the Options>Identity tool of the users they administrate.

As with any user:

- A check in the User Read column makes the field visible to the user.
- A check in the User Write column makes the field editable for the user.

Special for User Administrators:

- A check in the Group Read column enables a user to view the field of users in their group.
- A check in the Group Write column enables a user to edit the fields of users in their group.

- A check in the All Read column enables a user to view the field on all users on the server instance.
- A check in the All Write column enables a user to edit the fields of all users on the server instance.

	User Read	User Write	Group Read	Group Write	All Read	All Write
Group	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Location	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Representative	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost Center	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Language	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Company	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Department	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Salutation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Full Name	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free Text	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Picture 71: TCWEB Identity Rights

Note: The company, department, salutation, full name and free text fields cannot be configured independently. One flag controls access to all of them.

5.2.4 Configuring User Administrators in a Service Provider (ASP) Environment

The user administration functionality in TC/Web supports two user role concepts for a service provider environment.

- Helpdesk User
- Customer Administrator

5.2.4.1 Helpdesk User

The helpdesk user is an employee of the service provider whose responsibility is to provide assistance to all users of all customers of the service provider.

A service provider can have an ASP installation with multiple TCOSS instances. It must be easy to provide assistance to a user on any TCOSS instance.

To create a helpdesk user:

- Create a user on each TCOSS instance with the same user id, for example "Helpdesk1".
- Set the group for each user to the name of the TCOSS instance. i.e. "TCOSS01", "TCOSS02" etc.
NOTE: The group name MUST be different on each TCOSS instance.
On an ASP system TC/Web uses the combination of the User ID and the group name (Customer at login) as a unique identifier. TC/Web cannot differentiate between two users with the same User ID and group name, even if they are on different TCOSS instances.
- Set each user to a System User Administrator
TC/WEB tab> Administer Users dropdown> All users

A properly configured helpdesk user can UserSwitch to any user on any instance of an ASP system. If the user is on a different TCOSS instance than the one the helpdesk user is logged into, TC/Web will seamlessly log out the helpdesk user of the current TCOSS instance and the one that the user switched to will be logged on. If a helpdesk user does not have a user entry on the TCOSS instance of a particular user, an error will occur when trying to UserSwitch to this user.

Note: A helpdesk user can only see and work with the data on one TCOSS instance at a time, for example it is not possible to view a list of all users on all TCOSS instances.

5.2.4.2 Customer Administrator

The customer administrator is an employee of a company that is a customer of the Service Provider. This person's responsibility is to provide assistance to all users in the company.

In a service provider installation, all users from one customer are on one TCOSS instance and share the same group. The Customer a user enters at login is the same as the group name. A customer administrator is simply a group user administrator, and therefore very easy to configure.

To create a customer administrator:

- Create a user on the TCOSS instance where the customer’s users are.
- Set the Group for the user to the same Group as the users to be administrated.
- Set each user to a Group User Administrator
TC/WEB tab> Administer Users dropdown> Group users

Creating a customer administrator user puts some of the power in the hands of the customer and lightens the workload of the Service Provider. The customer can now handle routine tasks such as changing a user’s password.

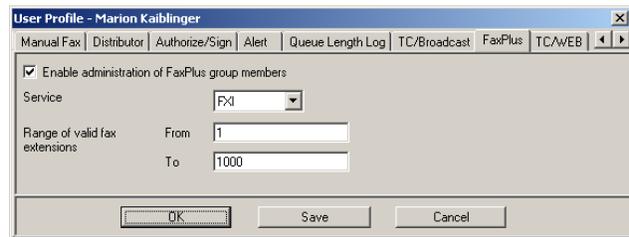
5.2.5 Configuring User Extensions (FaxPlus Settings)

To enable the TC/Web User Extensions tool, user administrators must have the following settings in TCfW.

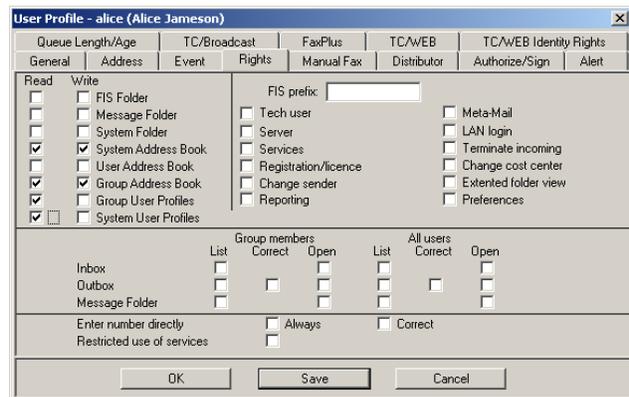
- FaxPlus tab > Enable administration of faxplus group members.
- Rights tab > Group Address Book /Write
- Rights tab > System Address Book /Write
- Rights tab > Group User Profiles /Read
- Rights tab > System User Profiles /Read

In the FaxPlus tab, the Service to be administrated can be configured. Each user entry can only be configured to administrate numbers in one kind of service. If a person needs to administrate more than one kind of service, a user entry should be created to administrate each service.

The range of allowable numbers can be configured. The administrator can only assign numbers within this range to the users.

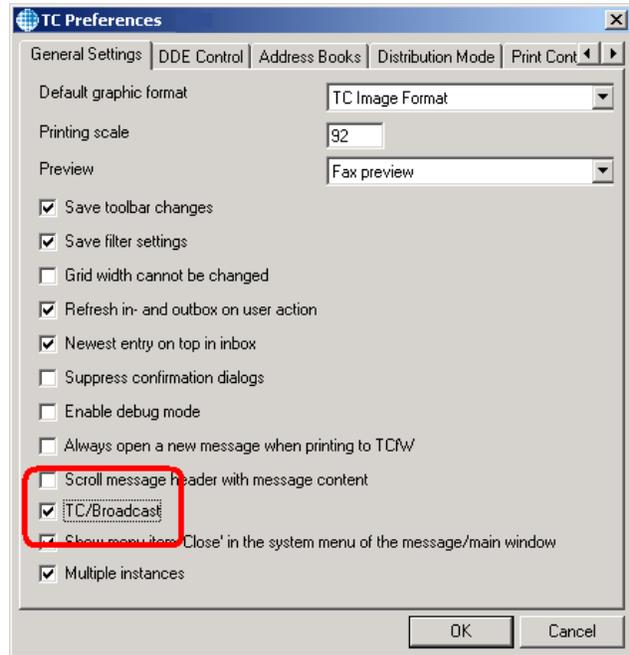


Picture 72: Fax Plus Settings



Picture 73: User Rights

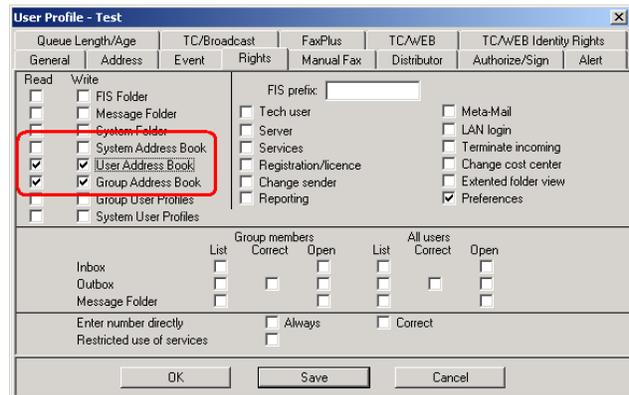
Note: To enable the FaxPlus tab in TCfW, the flag TC/Broadcast must be enabled in the menu item: Application preferences > General Settings.



Picture 74: General Settings

5.3 Distribution Lists

In order to create, edit or delete a distribution list, a user must have the right to write to the appropriate address books.



Picture 75: User Rights

6. SECURING TC/WEB

6.1 Administrative Logon Limitations

It is possible to limit administrative logons. You can prevent users with administrative rights from logging into TC/Web or you can allow such logons only if connecting from trusted IP addresses.

There are two registry keys configuring this behavior.

- **EnableAdminLogin** allows or disables any user who has system user administrative rights from logging into TC/Web.
Note: Group (Customer) admin users and normal users can always log in.
- **TrustedIPList** holds a list of trusted IP addresses. If a user with System User administrative rights (right 'Administer user' set to 'All users') attempts to login, TC/Web will check the clients IP address. Only if the IP address is also in the list of trusted IP addresses, the user will be allowed to log in.

The path to the following registry values is HKLM\Software\TOPCALL\TCWEB\.

Value Name	Description and Allowed Values	Type	Default
EnableAdminLogin	Enable administrative logins? 0... disabled 1... enabled	DWORD	1
TrustedIPList	Comma-separated list of IP addresses from which administrative logins are enabled. If empty, all IPs will be enabled.	STRING	""

Administrative logins depend on these two registry keys:

EnableAdminLogin	TrustedIPList	Administrative logins are
1	empty	enabled for all IP addresses
1	not empty	enabled for IP addresses from list
0	empty	disabled
0	not empty	disabled

The code determining the IP address is in the file iptest.aspx.

```
<%
  IP = Request.ServerVariables("REMOTE_ADDR")
  Session("REMOTE_IP") = IP
%>
```

You can also change this code with another one enabling connection through proxy servers:

```
<%
IP = Request.ServerVariables("HTTP_X_FORWARDED_FOR")
if IP = "" then
  IP = Request.ServerVariables("REMOTE_ADDR")
end if
Session("REMOTE_IP") = IP
%>
```

But you must know that HTTP_X_FORWARDED_FOR header comes from the proxy server and could be spoofed by someone to any value. So it must be used very carefully.

Note: Depending on using "localhost" in the URL or the computer name, the TrustedIPList has to be changed accordingly.

```
http://kmlink2-telms/ -> TrustedIPList = 10.18.165.9
http://localhost/ -> TrustedIPList = 127.0.0.1
```

6.2 IP Access Configuration

Access to TC/Web is defined in the Config\access.xml configuration file in the TC/Web directory. This is a text file which must be edited manually.

This file consists of different access rules. There are two types of rules, one for standard users and another one for administrative users.

- <access> section in configuration file defines access for standard users
- <adminaccess> section defines access for administrative users

These two tags must have the attribute “default” with default access (“allow” or “deny”) for this group. Each section can contain any number of allow or deny tags.

The access rule is one of the two tags: <allow> or <deny>. The IP address inside this tag can be defined by a full IP address, an IP address with “*” mask, an IP address range, or an IP address with submask.

Examples of a rule definition:

```
<configuration>
  <access>
    <allow>10.18.168.13</allow>
    <deny>10.18.168.*</deny>
    <deny>192.168.101.*</deny>
    <allow>127.0.0.1/255.255.255.0</allow>
    <deny>192.168.100.20</deny>
    <deny>192.168.101.*</deny>
    <allow>192.168.0.1-192.168.0.255</allow>
  </access>
</configuration>
```

Note: Allow and deny rules are processed in an order which is fixed in the configuration file. Processing an IP address is stopped after a first matching rule has been found. More specific rules must be configured at first.

By default, all rules from the adminaccess definition group are applied for all administrative users. In order to specify an access rule for a group, a property group with a group name must be added for the <allow> or <deny> tags.

Example: <allow group="apple">*</allow>

It is possible to define access to TC/Web using the HTTPS protocol. To specify the protocol type for an access rule you must simply add the protocol attribute to the desired access control tags (<allow> or <deny>).

Example: <allow protocol="https">*</allow>

An administrator can configure TC/Web by editing the XML file so that only logins with HTTPS protocol connections will be accepted, either for standard users or for administrative users, or for both user types.

If a user tries to access TC/Web with a protocol that has been disabled in the configuration, he/she will receive an error message.

Please Login

**With the current protocol,
access from your address to this system is denied.
Please try another protocol (HTTP or HTTPS).**

Username:

Password:

Picture 76: Access with current protocol is denied

If a user tries to log into TC/Web as administrator but uses an incorrect protocol, he/she will receive an error message.

Please Login

**Administrative login with the current protocol is disabled.
Please try again.**

Username:

Password:

Picture 77: Login with current protocol is denied

Note: “Administrative logon limitations” and “IP access configuration” features are two different features. In case you have both features configured, the administrator will have access to the TC/Web only if access is allowed by both features.

6.3 User IP Blocking

It is possible to configure TC/Web to block access from a user’s IP address for some period of time after a number of incorrect login attempts both with incorrect password or incorrect protocol.

Please Login

**Access from your address to this system will be denied for some time.
Please try again later.**

Username:

Password:

Picture 78: Error message while access from IP address is blocked

This feature must be configured in the Config\access.xml configuration file in the TC/Web directory. All parameters are inside the <blocklist> XML tag. In order to be enabled, this tag must have the “enabled” attribute set to 1.

The following parameters can be configured:

- <file> - a file name to keep blocked IP addresses between server restarts
- <loginattempts> - a number of incorrect login attempts after which access from this IP will be blocked
- <attemptstime> - a period of time in minutes between incorrect login attempts
- <blocktime> - a period of time in minutes for which access will be blocked
- <ignore> - IP address/IP address range/IP address with mask defines IP addresses for which this blocking feature will be disabled

Example of configuration file access.xml:

```
<configuration>
  <blocklist enabled="1">
    <file>C:\TCOSS\TCWEB\config\access_dynamic.xml</file>
    <loginattempts>3</loginattempts>
    <attemptstime>10</attemptstime>
    <blocktime>15</blocktime>
    <ignore>127.0.0.01/255.255.255.0</ignore>
  </blocklist>
</configuration>
```

In order to view a list of currently blocked IPs, you must log into TC/Web with a user who is equipped with the “Administrate All” right. You can access it from ‘Security’ → ‘Blocked IP List’ menu.



Picture 79: TC/Web menu

If there are IP addresses in the block list, they will be displayed.

Blocked IP Addresses:

Current time: 03.10.05 15:46:23

IP	Blocked	Count	Expire	Mom	
10.11.168.25	False	1	03.10.05 16:01:20	03.10.05 15:46:20	<input type="button" value="Remove"/>

Picture 80: List of blocked IP addresses

The list contains the following columns:

- IP – IP address of client
- Blocked – indicates if access for the client's IP is blocked
- Count – a number of the failed login attempts
- Expire – Time when the blocking will expire
- Mom – Time when the last failed login attempt occurred

In this view, it is possible to refresh the list by clicking Refresh or to remove IPs from the list by clicking Remove.

7. RESTRICTIONS

7.1 General

- To install more than one instance of TC/Web on one computer, it is necessary to modify TC/Web paths in incConst.aspx and incCustomize.aspx files.
- If multiple instances of TC/Web are installed on one computer, they will use the same settings for web-based player.
- It is not possible to have the same group name on more than one TCOSS instance in an ASP system.
- Configuration of fields in Identity tool: company, department, salutation, full name, and free text fields cannot be configured independently. One flag controls access to all of them.
- While sending a message from TC/Web from a user with a configured default template, LINK-SM can also process default template and update a message according to it. This can have unexpected consequences (e.g., if the template has recipients in "TO:", and you send a message to the authorizer who rejects it, the rejected message is also sent to the recipients defined in the template of the user). To prevent this behavior, either the LINK-SM default template processing must be turned off, or this template must not contain recipients.
- It is not possible to login via TC/Web from two or more tabs or windows in the same Browser instance using different users. The reason for this restriction is that browsers usually share their in-memory cookies among all tabs/windows within one browser instance.
- The feature "InPrivate browsing" which has been introduced with Internet Explorer version 8 is generally supported by TC/Web, except for "Per User GUI Branding" (refer to the corresponding chapter in this manual). Note however, if InPrivate browsing would be used, you would always need to enter your user name on the next TC/Web login as the user name is saved in the cookie which is deleted after particular InPrivate browsing session has been closed.
- AutoTimeZone feature works only with message tools Inbox, Outbox and Archive, but not in conjunction with Jobs (TC/Broadcast).

8. KNOWN ISSUES

8.1 TC/Web Authentication/Authorization Issues

- Due to quite complex and flexible user authentication/authorization concept (see chapter TC/Web User Authentication and Authorization) it could happen that TC/Web wouldn't always run under the same identity (for example, default is Network Service identity, but if impersonation would be activated later with anonymous authentication, TC/Web would run under the guest user IUSR and would eventually be not able to properly access its temporary folders TCWeb\Temp, TCWeb\Uploads and TCWeb\Imports.

Therefore it is recommended to delete those folders manually on any security related issues/errors and restart IIS afterwards

- Permission to create the temporary directory "TCRT"
Due to internal purposes, TC/Web creates an empty directory "TCRT" during first startup in one of the system temporary directories (e.g. C:\TEMP). But if the user account under which TC/Web is running (by default Network Service) doesn't have corresponding NTFS permissions for this temporary directory, following confusing error screen would appear during the first login into TC/Web:



Therefore it is recommended to enforce creating it in the own TC/Web's temporary directory in order to avoid potential permission issues.

Create the registry value HKLM\Software\TOPCALL\TCWEB\TCRT\ResTempDir (REG_SZ), and set it to the value c:\tcoss\tcweb\temp\

9. APPENDIX

9.1 Notes on Implementation

9.1.1 Importing Distribution Lists

Distribution lists can be imported from a text file by a user. The text file contains a list of addresses. As the import can take several minutes for a large list, the import is not performed in the TC/Web IIS application. The import is performed by a TCDISTMF2 Windows service.

9.2 Technical Details

9.2.1 User Profile Keys

The following information is read from and stored in the user profile located on the KCS server. The values cannot be modified manually. They are used by TC/Web Access to store the latest user view and filter settings internally. Additionally, the settings of the TC/WEB tab in TCfW may overrule the system defaults.

Key name	Description
InboxPreview	Show preview in inbox pane or not
InboxFiltStat	Last status filter settings for inbox. 0... All 1... New & Read 2... Only New
InboxFiltRec	Last recipient filter settings for outbox 0... Current 1... Group 2... Other
InboxFiltRecOther	Last other recipient for filter settings in inbox
OutboxPreview	Show preview in outbox pane or not
OutboxFiltStat	Last status filter settings for outbox 0... All 1... Not Sent 2... Problems
OutboxFiltOri	Last originator filter settings for outbox 0... Current 1... Group 2... Other
OutboxFiltOriOther	Last other originator for filter settings in outbox
OtherPreview	Show preview in archive/public/private/system or not
ArchiveFiltRec	Last recipient/originator filter settings for archive 0... Current 1... Group 2... Other
ArchiveFiltRecOther	Last other recipient/originator for filter settings in archive