

# Kofax Communication Server

## KCS Backup Technical Manual

Version: 10.2.0



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# Introduction

## 1.1 Purpose

This manual describes KCS Backup, the tool for backing up and recovering Kofax Communication Server (KCS) configuration.

## 1.2 Use Case

Fundamentally, KCS Backup tool was created with the following scenario in mind: recovering KCS configuration from failure. These are some of the possible accidents that can be recovered using KCS Backup:

- Deletion of KCS configuration files
- Windows registry problems
- Corruption of KCS user profiles
- Improper configuration of KCS

These are some of the most important KCS configuration items that can be backed up via this tool:

- KCS system folders
- Channels
- User profiles and address books
- Configuration of various KCS components
- Windows registry
- Custom files

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**Note:** KCS Backup does NOT allow backing up the entire content of KCS file structure. For this kind of functions, consider installing KCS server in tandem mode.

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# Installation

## 2.1 Prerequisites

KCS Backup is supported on the same platforms as Kofax Communication Server.

Required software

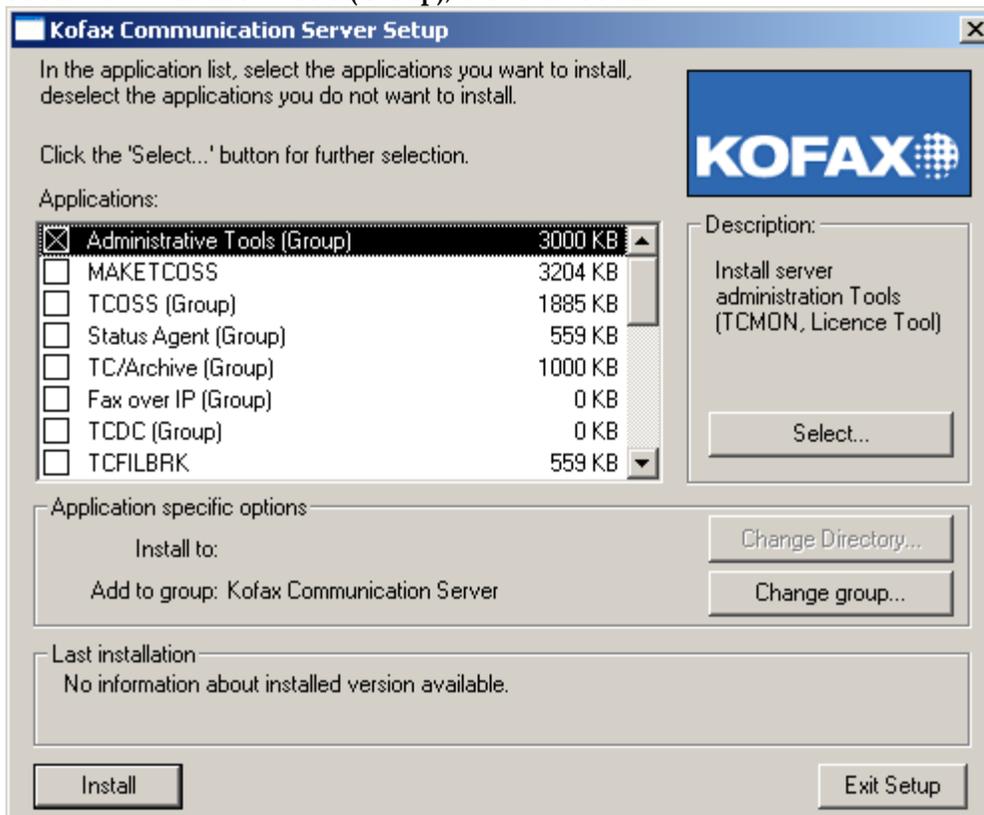
- KCS Backup requires Microsoft .NET Framework 3.5 service pack 1

KCS Backup must be installed on a computer that can connect to the KCS server(s) that you want to back up. Alternatively, you can install KCS Backup directly on the KCS server. However, make sure that the backed-up information is stored in a secure location.

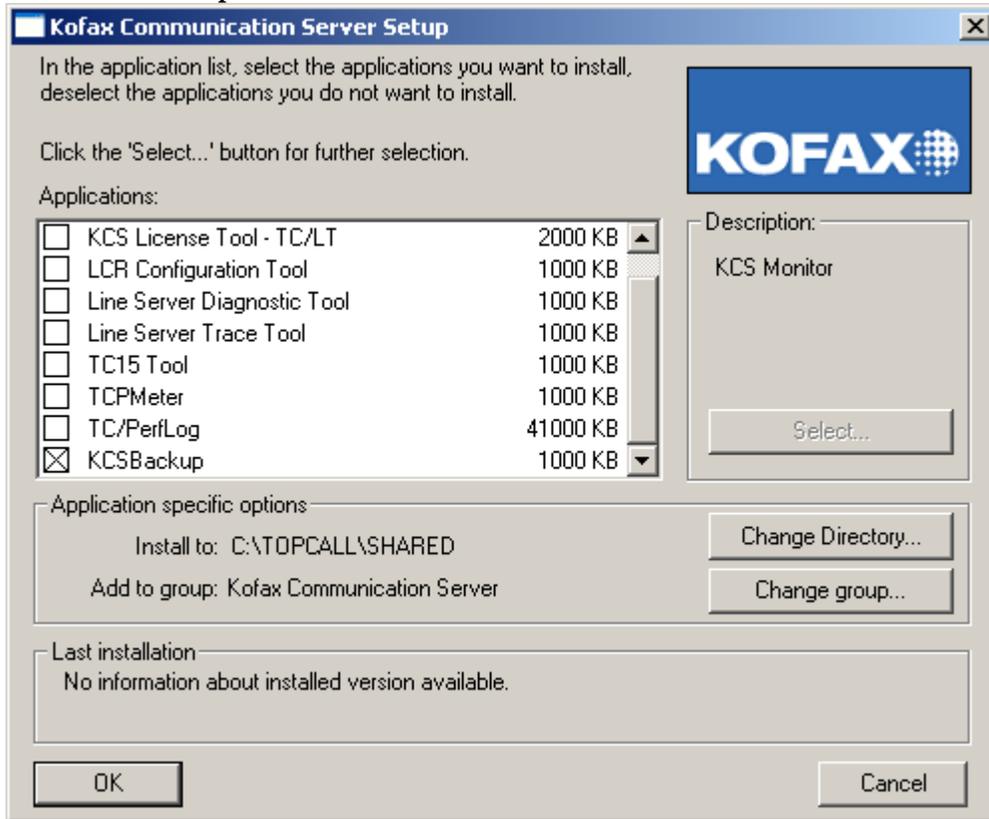
## 2.2 Installing KCS Backup

### ► To install KCS Backup:

- 1 Start Kofax Communication Server setup (KCS 9.0 or higher).
- 2 Select **Administration Tools (Group)**, then click **Select**.



- 3 Select **KCS Backup**. Click **OK**.



- 4 Additionally, you may want to install KCS Monitor from the Administrative Tools (Group).
- 5 Click **Install**.
- 6 Wait until the product is installed, then restart the computer.
- 7 Use KCS Monitor to start TCSR.V.

## 2.3 Licensing

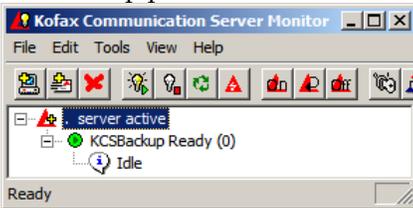
KCS Backup requires a separate license called “KCS Backup”. Use the KCS Licensing Tool to load the license on a KCS server. Then you need to connect KCS Backup to that KCS server. For more information, see chapter *Managing Licenses*.

License is required only for backing up. License is not checked when recovering.

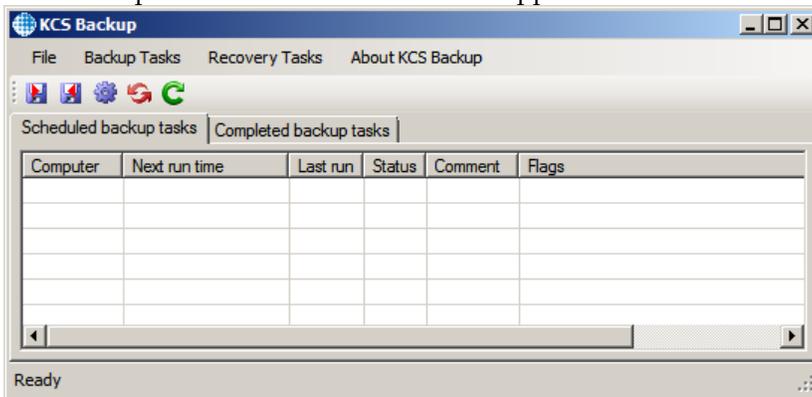
# Configuration

► **To configure KCS Backup:**

- 1 Before you can configure KCS Backup, make sure that the TCSRV service is running, including the KCSBackup process.

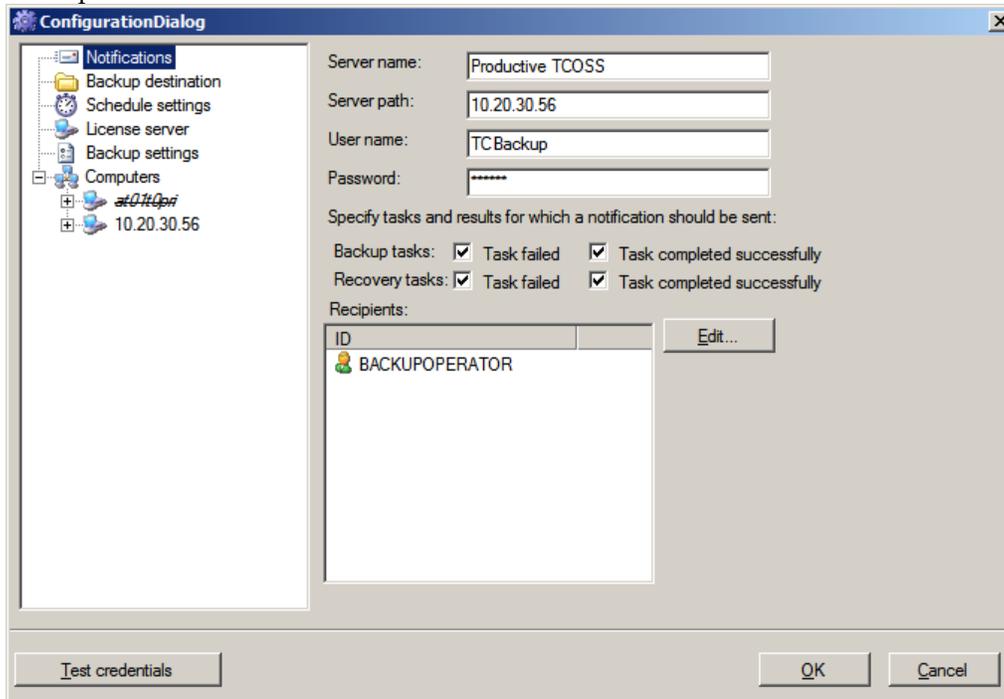


- 2 Start the KCS Backup application by selecting Start | All Programs | Kofax Communication Server | KCS Backup from the start menu. Run the application as an administrator.



## Configuration

- 3 Start the configuration, either by clicking the menu icon  or by selecting “Configure...” from the Backup Tasks menu.



In the KCS Backup configuration, you can perform the following tasks:

- Managing Notifications
- Managing Backup
- Managing Licenses
- Managing Archive Settings
- Managing KCS Servers
- Managing Log Files

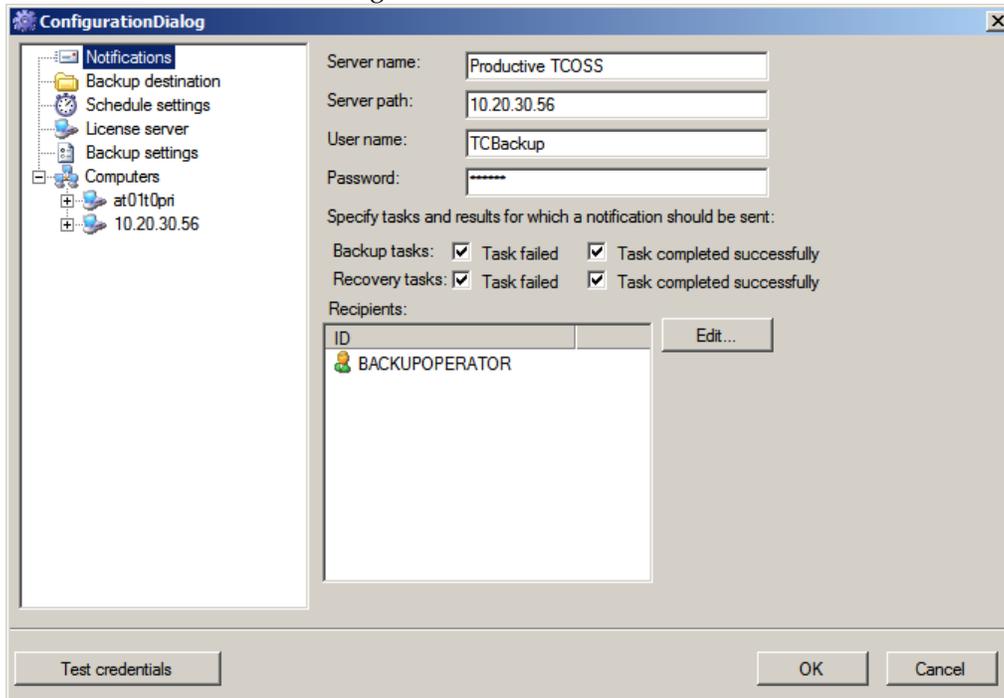
### 3.1 Managing Notifications

KCS Backup can be configured to send special notification messages to configured users about the outcome backup and recovery tasks.

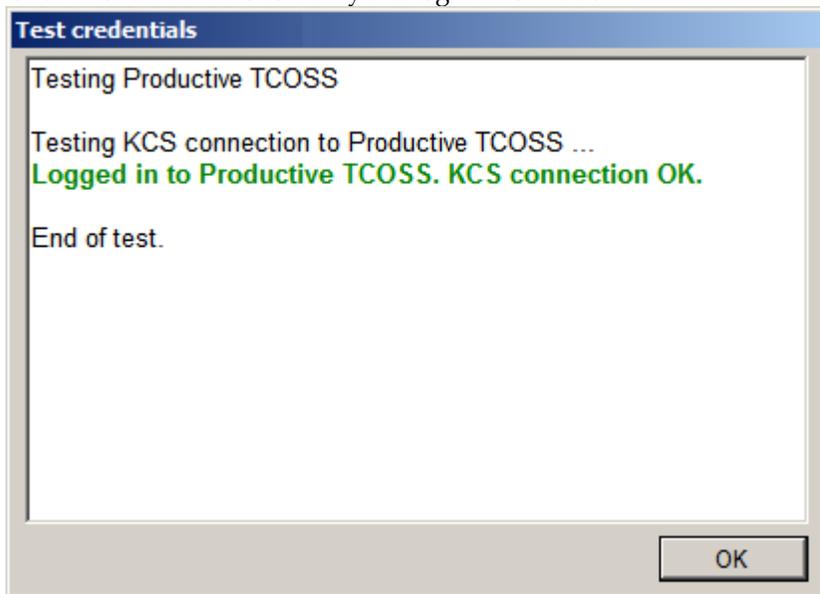
## Configuration

### ► To manage notifications

- 1 Select Notifications in the configuration menu.

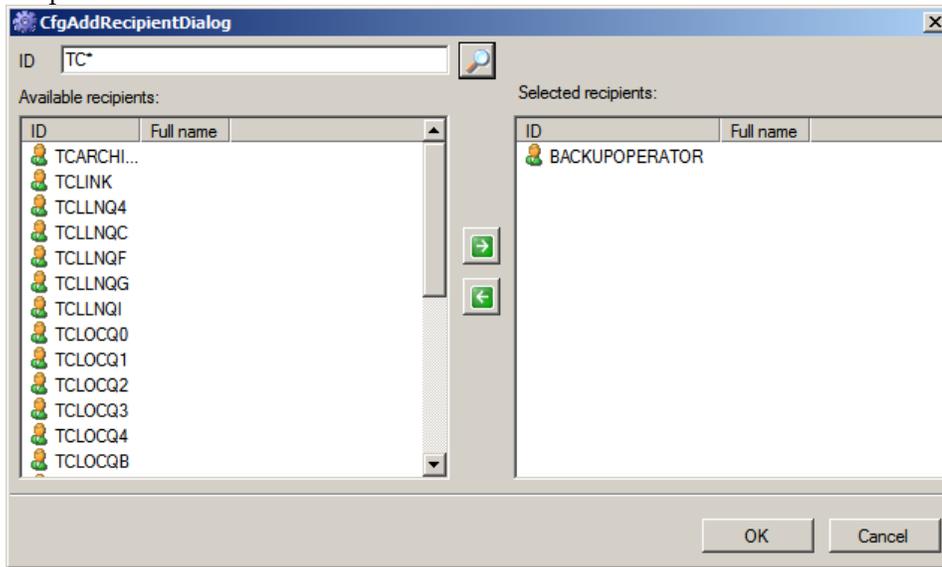


- 2 Type the login information of a KCS server. The specified user must have a valid TOPCALL address.
- 3 Click Test credentials to verify the login information.



- 4 Select what notifications you want to send out. You can receive information for successful and failed backup and recovery tasks.

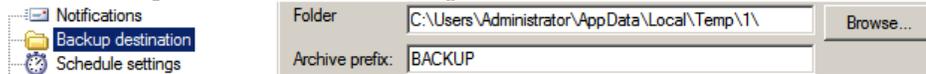
- 5 Click Edit to display a list of users. Select one or more users and click  to add them to the list of recipients for notification emails. Click OK.



### 3.2 Managing Backup Destination

- To manage the backup file name and folder

- 1 Select Backup destination in the configuration menu.



- 2 In the Folder field, type the destination folder, or click Browse... to navigate to it.
- 3 In the Archive prefix field, specify the prefix of the backup archive file.

The full name of archive will be a concatenation of prefix, date, and time in the format prefix-YYYYMMDDTHHMMSS-computer, for example:

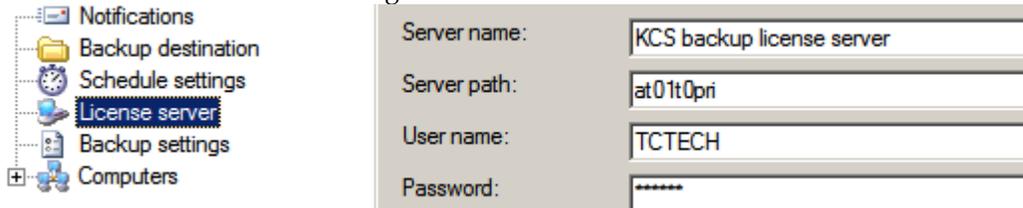
 BACKUP-20100225T100024-10.20.30.56.zip

 BACKUP-20100225T101012-10.20.30.56.zip

### 3.3 Managing Licenses

- To manage licenses

- 1 Select License server in the configuration menu.



- 2 Type a descriptive server name, the KCS server path, KCS user name, and password.

## Configuration

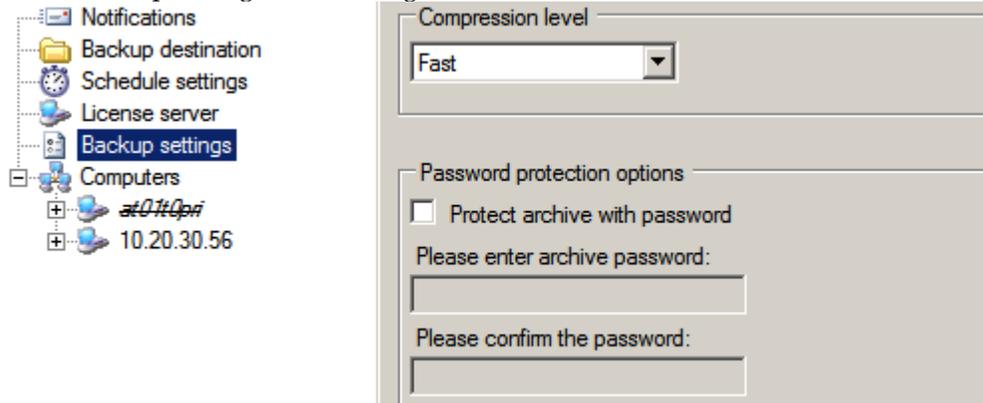
- 3 Click Test credentials to verify the connection.



## 3.4 Managing Archive Settings

- To manage backup archive settings:

- 1 Select Backup settings in the configuration menu.



- 2 Select the compression level of the ZIP archive that contains backed up data.
- 3 Optionally, you can protect the archive with password.

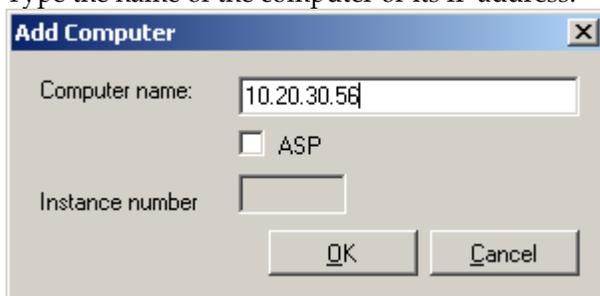
## 3.5 Managing KCS Servers

- To add a new KCS server for backup:

- 1 Right-click Computers in the configuration menu and select "Add computer".

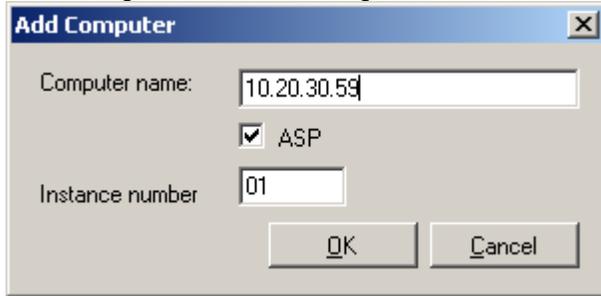


- 2 Type the name of the computer or its IP address.



## Configuration

If the computer is an ASP computer, select ASP and enter the Instance number.



The 'Add Computer' dialog box contains the following fields and controls:

- Computer name:
- ASP
- Instance number:
- Buttons:

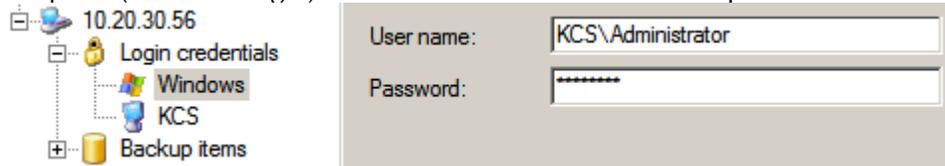
Note: ASP computers are displayed in the tree view in following format:

<computer-name>.<instance-number>

For example: Computer VMRM-ASP with instance number 01



- Expand Login credentials and select Windows. Type user name and password for connecting to the computer (Windows login). Administration credentials are required.

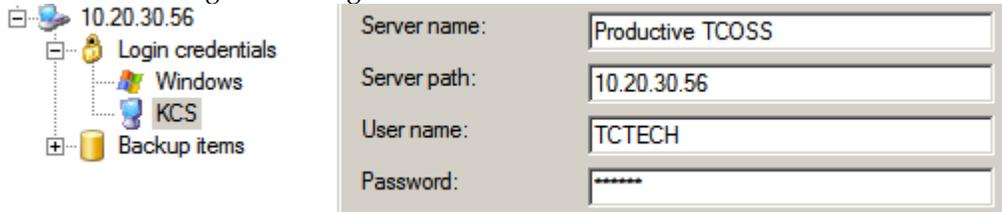


It is recommended to enter user name in one of the following formats:

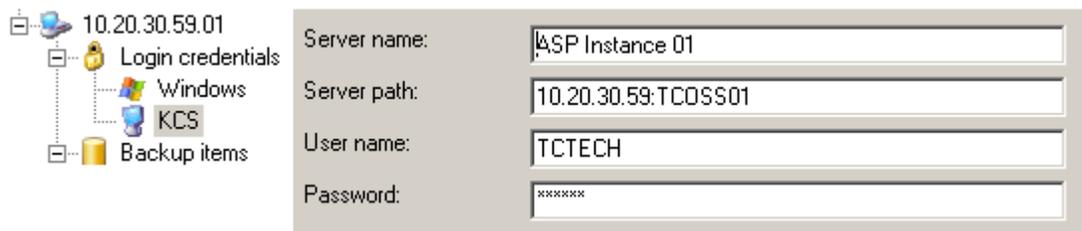
<computer>\<user>

<domain>\<user>

- Select KCS. Configure KCS login information

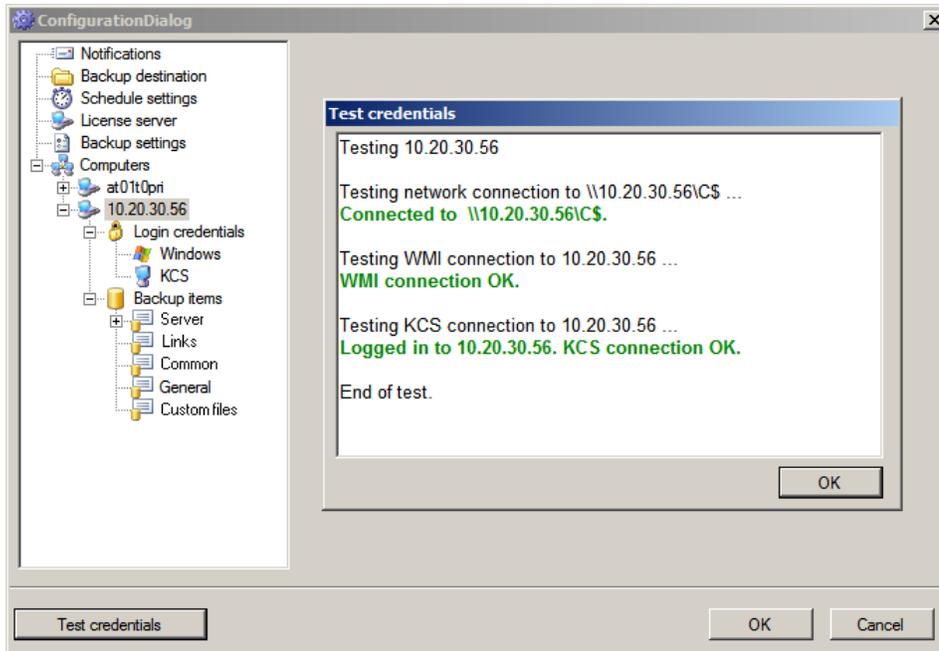


If the computer is an ASP computer you must include the instance number in the server path.  
For example. TCOSS instance 01 on computer 10.20.30.59



## Configuration

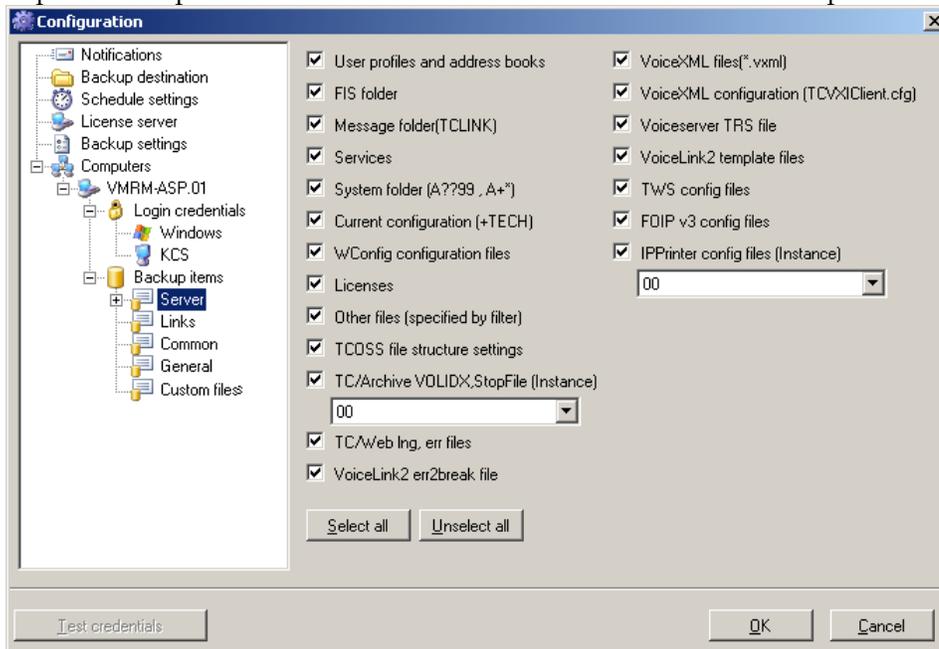
- 5 To verify that KCS Backup can connect to the computer, select the computer name and click Test credentials.



- 6 Click OK.

### ► To configure items for backup:

- 1 Expand Computers in the configuration menu and select the KCS server you want to configure.
- 2 Expand Backup items and select Server. Check which KCS server components to back up.

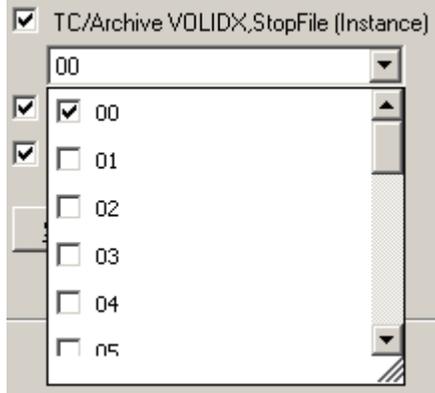


- 3 If you selected "Other files (specified by filter)", expand TC/SP and select Filter. In the Folder field, select an existing folder, or type a folder (wild cards supported), e.g. "TC/TECH" or "John\*". In the File field, type the file name (wild cards supported). Click Add to add the folder to the list selected for

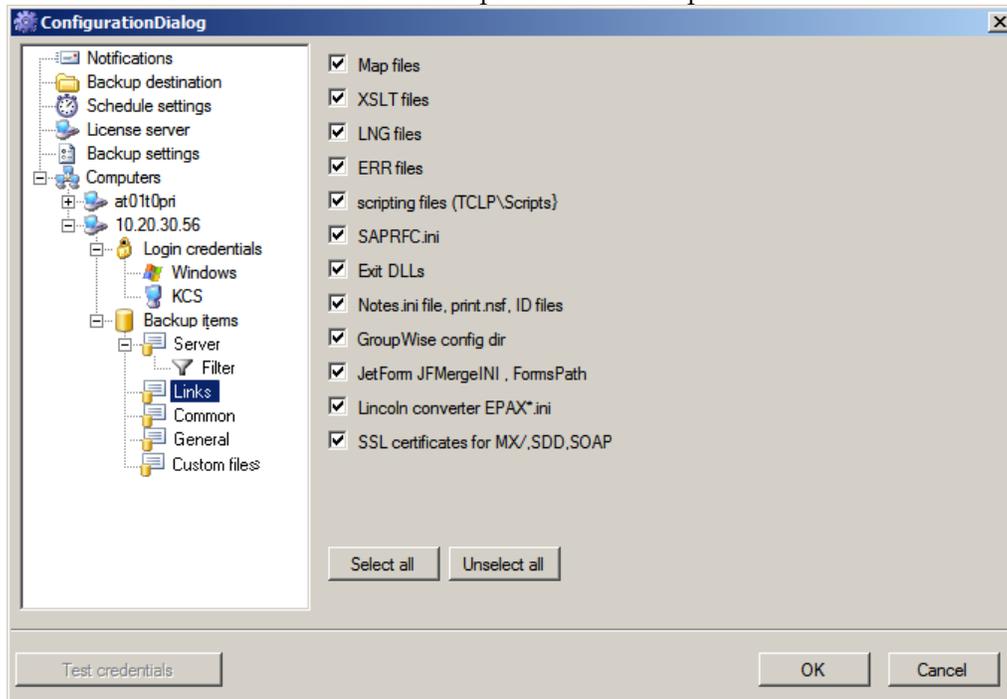
**Configuration**



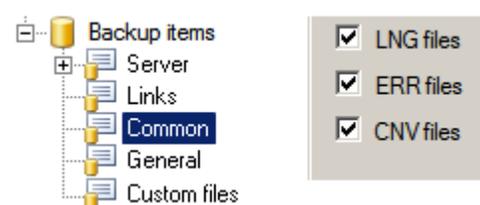
- 4 If you select TC/Archive or IPPrinter, you can select the instance number that you want to back up



- 5 Select Links. Check which KCS link components to back up.

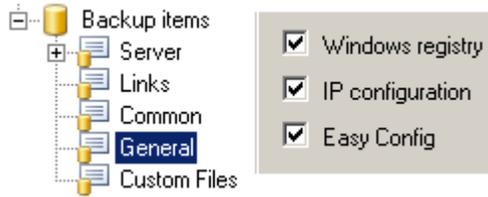


- 6 Select Common. Check which common KCS components to back up.

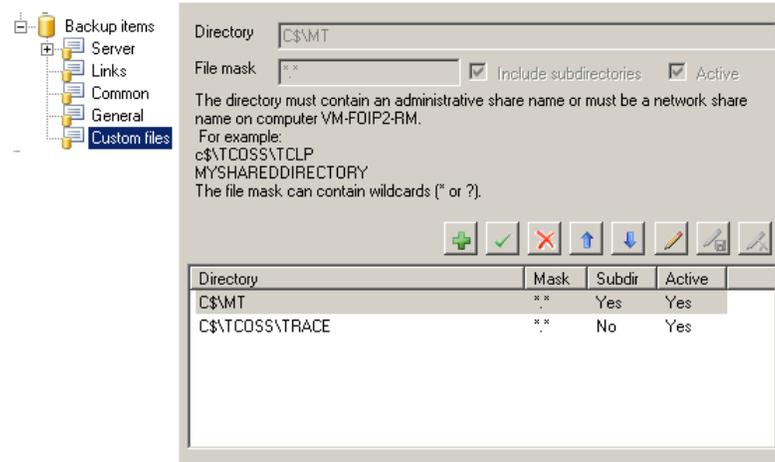


## Configuration

- 7 Select General. Check items to back up.



- 8 Select Custom files. Specify folder and file mask.



To add a new directory click the  button. Enter a directory and file mask. The directory must contain an administrative share or must be a network share on the selected computer. If you also want to back up the subdirectories, select "Include subdirectories". Click the  button to save the custom files configuration. To cancel, click the  button.

To edit a directory, select the custom files configuration in the list by clicking on it and then click the  button. Modify the parameters that you want. You can set a custom files configuration to inactive by unchecking the checkbox "Active". To save the changes click the  button. To discard the changes click the  button.

To test a custom files configuration select it in the list and then click the  button. This verifies that the directory of the custom files configuration is accessible on the selected computer.

To remove custom files configuration from the list, select it and then click the  button.

To change the order of the custom files configurations select an item in the list and then click the   buttons.

- 9 Click OK.

### ► To manage the list of KCS servers

- 1 Expand Computers in the menu and select the KCS server you want to manage.

## Configuration

- 2 Right-click the computer and select one of the options.



Select Disable if you want to keep a computer in the list but you do not want to back it up by default.

Select Enable if you want to back up a computer by default.

Select Remove computer if you want to delete it from the list. Login information and information about what items to back up will be lost.

Select Rename if you want change computer's name or IP address.

## 3.6 Managing Log Files

For logging the standard library log4net is used. Log files are written to the C:\TCOSS\Trace directory. KCS Backup creates two log files:

- KCSBackup.log (information about user interface issues)
- KCSBackupSrv.log (information about service issues)

You can configure the level of logging by editing log configuration files. Find the configuration files in C:\TOPCALL\KCSBACKUP directory:

- KCSBackupGUI.log4net.config
- KCSBackupSrv.log4net.config

By default, the log level is set to "ERROR". To modify the level of detail, edit the files in a text editor. To enable debugging (additional information written to log file), change the line

```
<level value="ERROR" />
```

to

```
<level value="DEBUG" />
```

## 3.7 Managing Recovery Timeout

During a recovery operation no backup operation can be started. The backup service waits at least 60 minutes until the recovery operation completes. This timeout value can be configured in the Windows registry.

Key	Name	Type	Description
HKLM\Software\Topcall\KCSBackup	TimeoutRecover	REG_DWORD	Time out value in minutes

# Backup

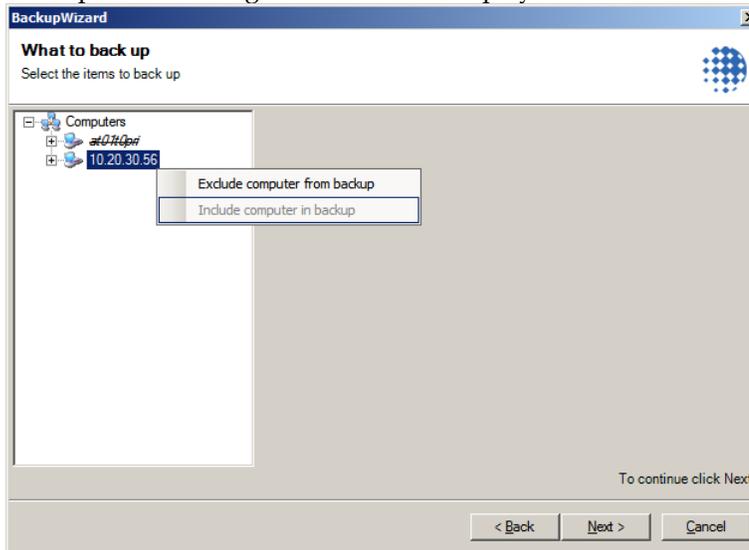
## 4.1 Creating a Backup Task

► To create a backup task:

- 1 Start the KCS Backup Wizard, either by clicking the menu icon  or by selecting “Back up configuration and files” from the Backup Tasks menu. Click Next.

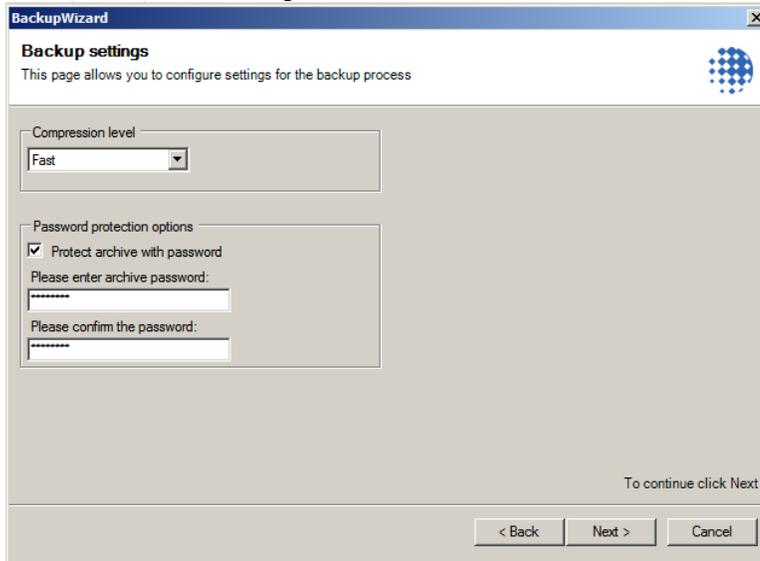


- 2 Decide which of the configured KCS servers you want to back up. To select a server for backup, right-click its name and select “Include computer in backup”. To omit a server from backup, right-click its name and select “Exclude computer from backup”. Only servers that have been added to the KCS Backup via the configuration tool are displayed. Please refer to chapter *Managing KCS Servers*.



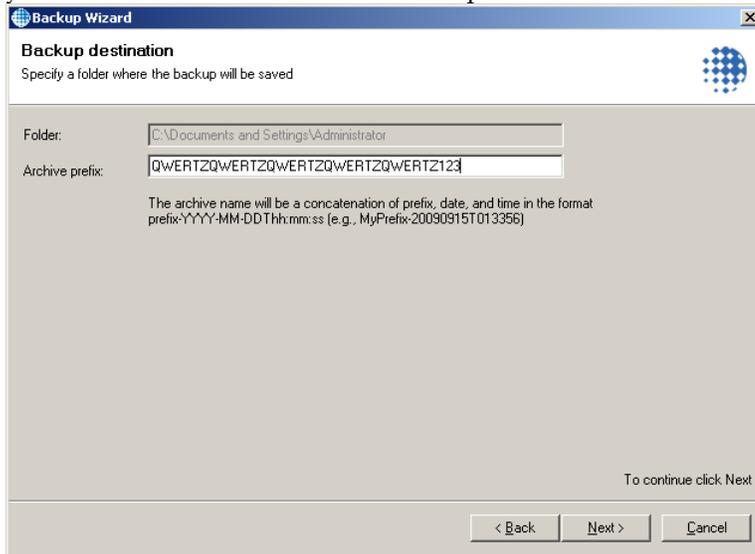
## Backup

- Expand the KCS server you want to back up. Review the “Login credentials” and “Backup items” options. Refer to chapter *Managing KCS Servers* if you need more information about the options. Click Next.
- Review your backup archive settings. Refer to chapter *Managing Archive Settings* if you need more information about the options. Click Next.



The screenshot shows the 'Backup settings' dialog box in the Backup Wizard. The title bar reads 'BackupWizard'. The main heading is 'Backup settings' with a sub-heading 'This page allows you to configure settings for the backup process'. There are two main sections: 'Compression level' with a dropdown menu set to 'Fast', and 'Password protection options' with a checked checkbox 'Protect archive with password'. Below this are two password input fields labeled 'Please enter archive password:' and 'Please confirm the password:'. At the bottom right, it says 'To continue click Next'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

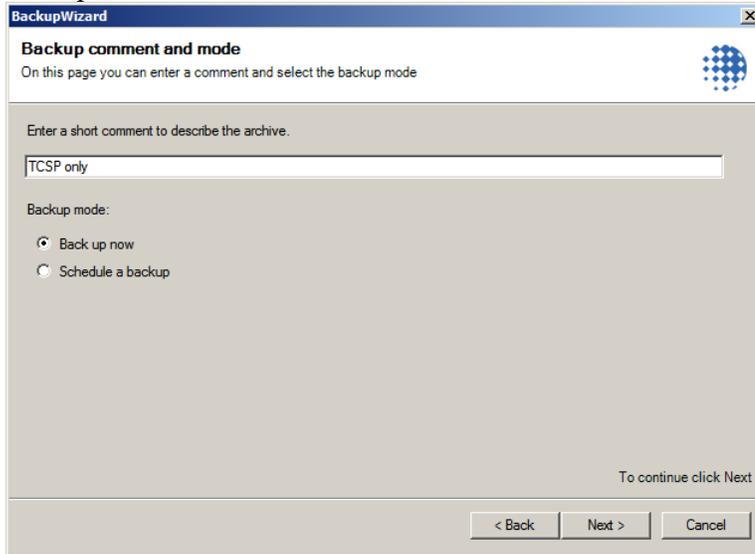
- Review the destination folder and the archive prefix. Refer to chapter *Managing Backup Destination* if you need more information about the options. Click Next.



The screenshot shows the 'Backup destination' dialog box in the Backup Wizard. The title bar reads 'Backup Wizard'. The main heading is 'Backup destination' with a sub-heading 'Specify a folder where the backup will be saved'. There are two input fields: 'Folder:' containing 'C:\Documents and Settings\Administrator' and 'Archive prefix:' containing 'QWERTZQWERTZQWERTZQWERTZQWERTZ123'. Below these fields is a note: 'The archive name will be a concatenation of prefix, date, and time in the format prefix-YYYY-MM-DDThh:mm:ss (e.g., MyPrefix-20090915T013356)'. At the bottom right, it says 'To continue click Next'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

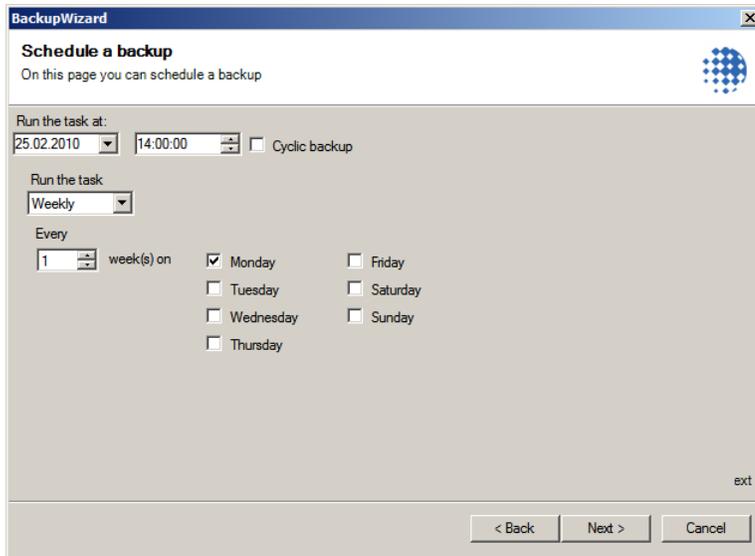
## Backup

- 6 Type a short comment to describe the backup archive. Select either immediate backup or scheduled backup. Click Next.



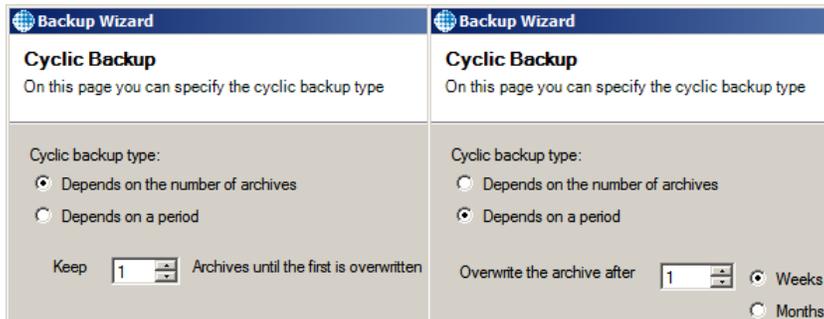
The screenshot shows the 'BackupWizard' dialog box with the title 'Backup comment and mode'. Below the title bar, it says 'On this page you can enter a comment and select the backup mode'. There is a text input field containing 'TCSF only'. Below that, under 'Backup mode:', there are two radio buttons: 'Back up now' (which is selected) and 'Schedule a backup'. At the bottom right, it says 'To continue click Next'. At the very bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

- 7 If you selected to schedule a backup in the previous step, you can configure when the backup should start. Also, you can configure periodical backups, running the backup daily, weekly, or monthly. Click Next.



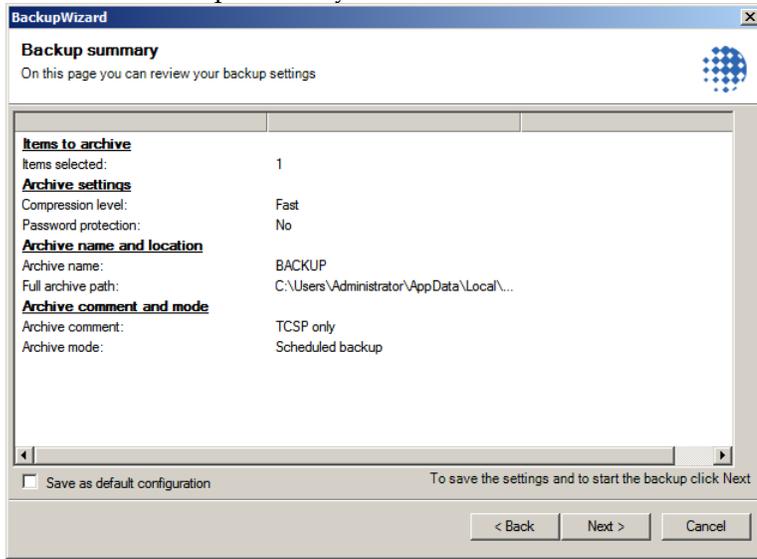
The screenshot shows the 'BackupWizard' dialog box with the title 'Schedule a backup'. Below the title bar, it says 'On this page you can schedule a backup'. There is a section 'Run the task at:' with a date dropdown set to '25.02.2010', a time dropdown set to '14:00:00', and a checkbox for 'Cyclic backup' which is unchecked. Below that, 'Run the task' is set to 'Weekly'. Under 'Every', there is a dropdown set to '1' and 'week(s) on'. There are checkboxes for days of the week: Monday (checked), Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday (all unchecked). At the bottom right, it says 'ext'. At the very bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

- 8 If you selected cyclic backup in the previous step, you can configure what to do with old backups. Click Next.



The image shows two side-by-side screenshots of the 'Backup Wizard' dialog box, both titled 'Cyclic Backup'. Both have the subtitle 'On this page you can specify the cyclic backup type'. The left screenshot shows 'Cyclic backup type:' with two radio buttons: 'Depends on the number of archives' (selected) and 'Depends on a period' (unselected). Below that, it says 'Keep 1 Archives until the first is overwritten'. The right screenshot shows 'Cyclic backup type:' with two radio buttons: 'Depends on the number of archives' (unselected) and 'Depends on a period' (selected). Below that, it says 'Overwrite the archive after 1' with two radio buttons: 'Weeks' (selected) and 'Months' (unselected).

- Review the backup summary. Click Next.

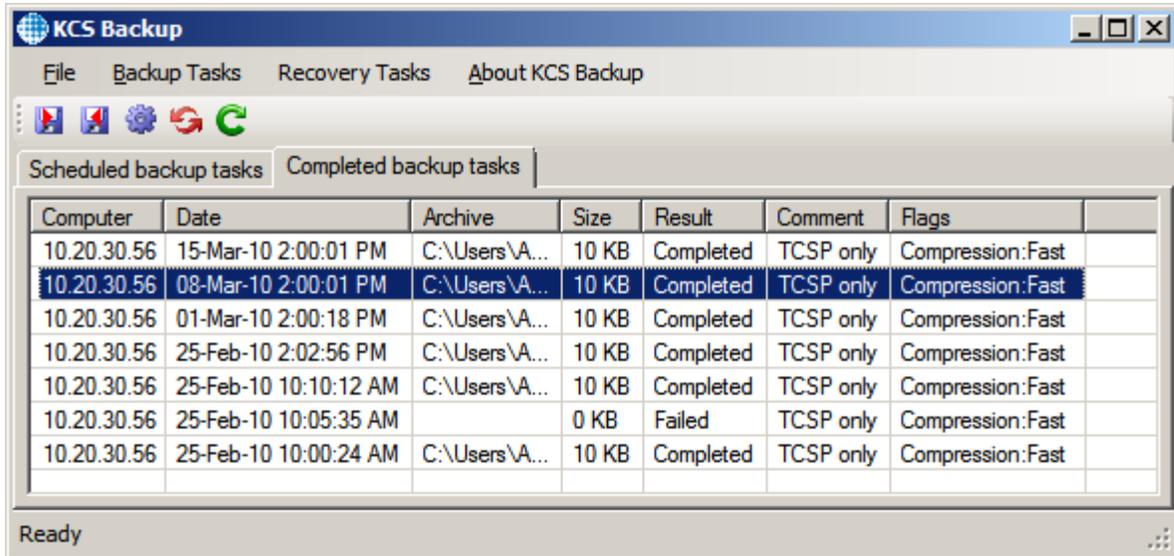


You can select “Save as default configuration” to use your current configuration of the backup task as the new default.

- Click OK to create the backup task.

## 4.2 Managing the Backup Tasks List

Each scheduled backup task and each completed backup task generates a new line in the task list section of the main user interface.



You can remove a scheduled backup task by selecting it and pressing Del, or selecting “Delete scheduled backup task” from the Backup Tasks menu.

You can remove a completed backup task by selecting it and pressing Del, or selecting “Delete completed task and zip file” from the Recovery Tasks menu.

## 4.2.1 Automatic Refresh

You can disable the automatic refresh of the completed backup tasks by clicking on the  button. The icon of the button changes to  and the refresh button  is enabled.

Note: If automatic refreshing is enabled, the manual refresh button is greyed out: .

# Recovery

## 5.1 Preparing for Recovery

When the KCS configuration is damaged or lost, KCS Backup tool allows to recover it from an existing backup. To successfully recover a saved configuration, the following prerequisites must be met:

- The same operating system must be installed
- The same release (version) of KCS software must be installed on the target computer
- The same components of KCS software must be installed
- Target computer must be accessible via network

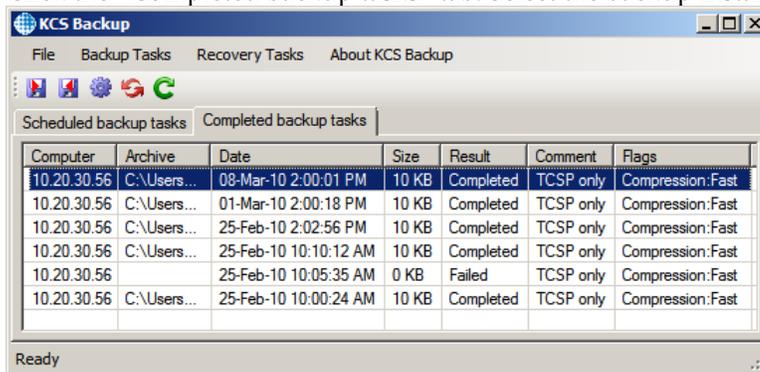
Immediately before performing recovery, the following must be ensured:

- TCOSS must be running
- License is not necessary
- All other KCS components must be shut down or inactive, especially links
- All other KCS components installed on other computers connected to target computer must be shut down

## 5.2 Performing the Recovery

### ► To recover from a backup:

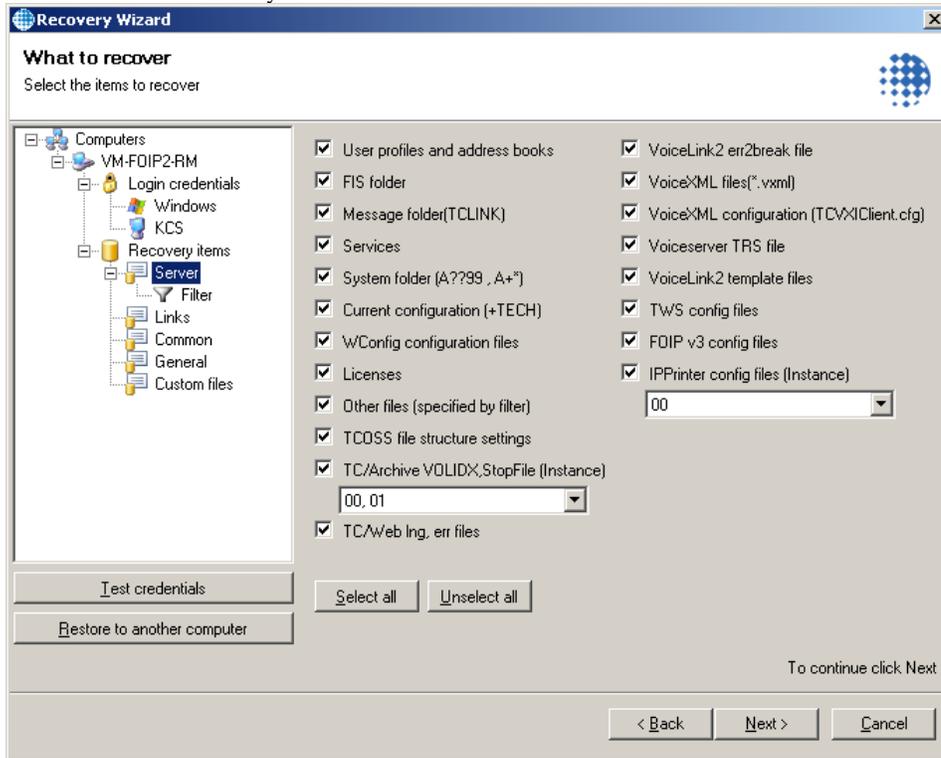
- 1 Start the KCS Backup application by selecting Start | All Programs | Kofax Communication Server | KCS Backup from the start menu.
- 2 Click the “Completed backup tasks” tab. Select the backup instance that you want to recover.



Computer	Archive	Date	Size	Result	Comment	Flags
10.20.30.56	C:\Users...	08-Mar-10 2:00:01 PM	10 KB	Completed	TCSP only	Compression:Fast
10.20.30.56	C:\Users...	01-Mar-10 2:00:18 PM	10 KB	Completed	TCSP only	Compression:Fast
10.20.30.56	C:\Users...	25-Feb-10 2:02:56 PM	10 KB	Completed	TCSP only	Compression:Fast
10.20.30.56	C:\Users...	25-Feb-10 10:10:12 AM	10 KB	Completed	TCSP only	Compression:Fast
10.20.30.56		25-Feb-10 10:05:35 AM	0 KB	Failed	TCSP only	Compression:Fast
10.20.30.56	C:\Users...	25-Feb-10 10:00:24 AM	10 KB	Completed	TCSP only	Compression:Fast

- 3 Start the KCS Recovery Wizard, either by clicking the menu icon  or by selecting “Recover configuration and files” from the Recovery Tasks menu. Click Next.

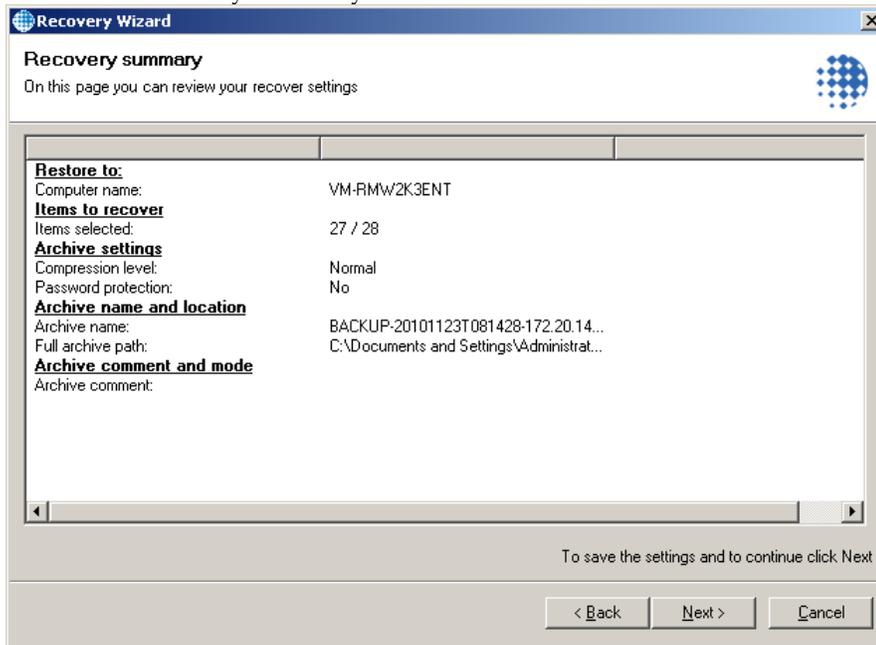
- 4 Select which items do you want to recover.



- 5 If necessary, update the address of the computer and the Windows user name and password. Click Next.

**Note:** You can change the address of the computer by right-clicking its name or by clicking on the “Restore to another computer” button. If you recover to a computer address that is different to the address where the items were saved the KCS licenses will not be recovered!

- 6 Review the recovery summary window.



- 7 Read the important information. Select “Click here to start recovering files”. Click Next.
- 8 Wait until recovery is successfully completed.

## Recovery

See chapter *Hints and Restrictions*, especially section *Recovering from Fatal Failure* for tips and further important information.

### 5.3 Refresh

- ▶ **To refresh the list of completed tasks**, press F5 or select “Refresh list” in the Recovery Tasks menu.
- 

**Note** The list is automatically refreshed every 10 minutes.

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# Hints and Restrictions

## 6.1 Hints

### 6.1.1 Recovering from Fatal Failure

- ▶ **To recover from a fatal failure in which the computer needs to be reinstalled, it is recommended to proceed as follows:**
  - 1 Install the same operating system as before.
  - 2 Use the same settings as before (computer name, network configuration, etc.). You can use the information collected during backup (for more information, see *Network Configuration Not Recovered Automatically*).
  - 3 Check connectivity to the KCS Backup computer.
    - a Make sure that WMI connection to the computer is successful.
    - b Testing KCS connection to server will fail because no TCOSS is installed.
  - 4 Use KCS Backup to recover Windows registry only.
  - 5 Install KCS; select exactly the same components as before the failure. Configuration settings for the installation will be read from the registry.
  - 6 Verify that the TCCPUNUMBER stayed the same. If not, restoring KCS licenses will fail.
  - 7 Restart the computer if required.
  - 8 Use WConfig to modify shortcut to WConfig directory and install configuration locally.
  - 9 Start TCOSS.
  - 10 Use KCS Backup to recover all data and files.
  - 11 Restart TCSR.V.

### 6.1.2 Access Denied Error with UAC Enabled

KCS Backup tries to connect to the administrative share c\$ to back up files. In a workgroup it may be necessary to disable Remote UAC by changing the registry entry that controls it.

The registry entry is: **HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\Policies\system\LocalAccountTokenFilterPolicy**. When the value of this entry is zero (0), Remote UAC access token filtering is enabled. Set the value to "1" to disable remote UAC.

### 6.1.3 TCOSS Registry Value FileName Not Restored

The registry value **HKEY\_LOCAL\_MACHINE\SOFTWARE(\Wow6432Node)\TOPCALL\TCOSS\Drive0\FileName** is not restored when using the EasyConfig installation variant.

## 6.2 Restrictions

### 6.2.1 Network Configuration Not Recovered Automatically

Even though you can back up network configuration, it cannot be recovered automatically. After successful recovery, the collected network configuration information will be attached to the recovery notification email as NetworkSettings.xml. You can use this information to reconstruct your network in case of failure.