

# Kofax Communication Server

## KCS Backup Technical Manual

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**KOFAX**

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## Chapter 1

# Preface

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

## 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

**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.

## Chapter 2

# Installation

This section describes the installation of KCS Backup.

## 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

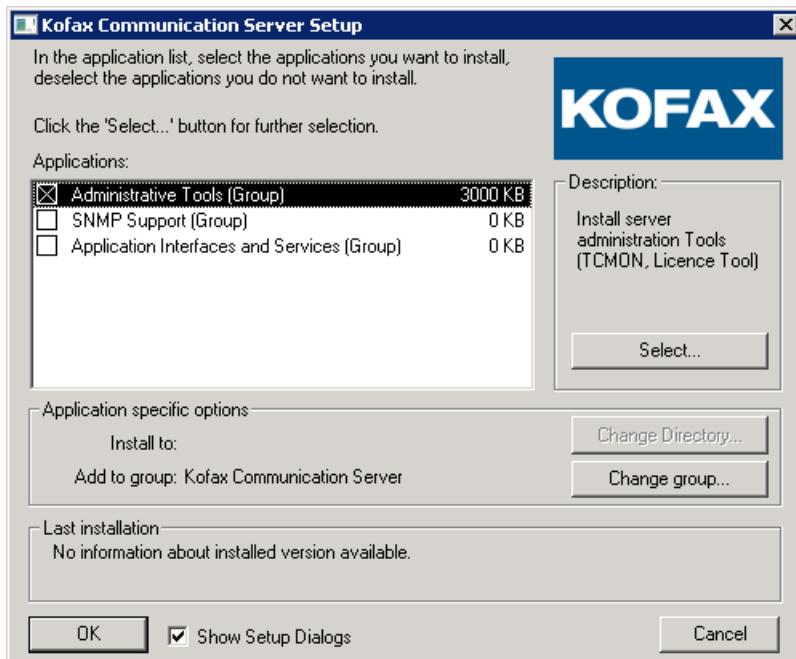
KCS Backup must be installed on a computer that can connect to the KCS server(s) that you want to back up. Alternatively, you can install KCS Backup directly on the KCS server. However, make sure that the backed-up information is stored in a secure location.

## Installing KCS Backup

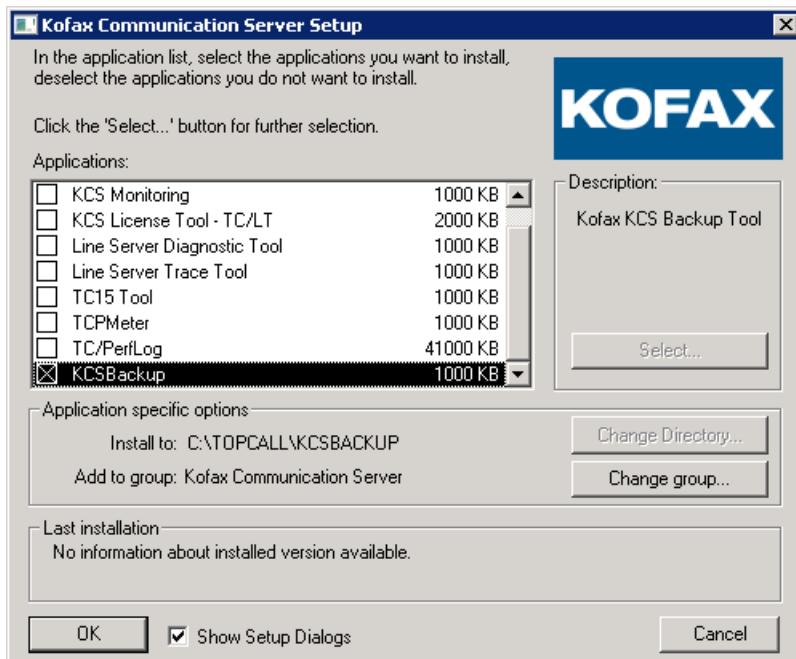
To install KCS Backup:

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 TCSRV.

## 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\*](#).

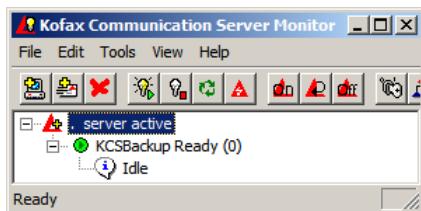
License is required only for backing up. License is not checked when recovering.

## Chapter 3

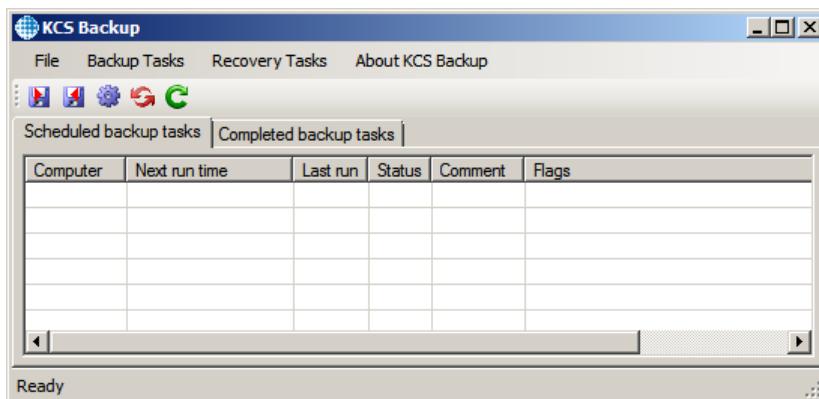
# Configuration

To configure KCS Backup:

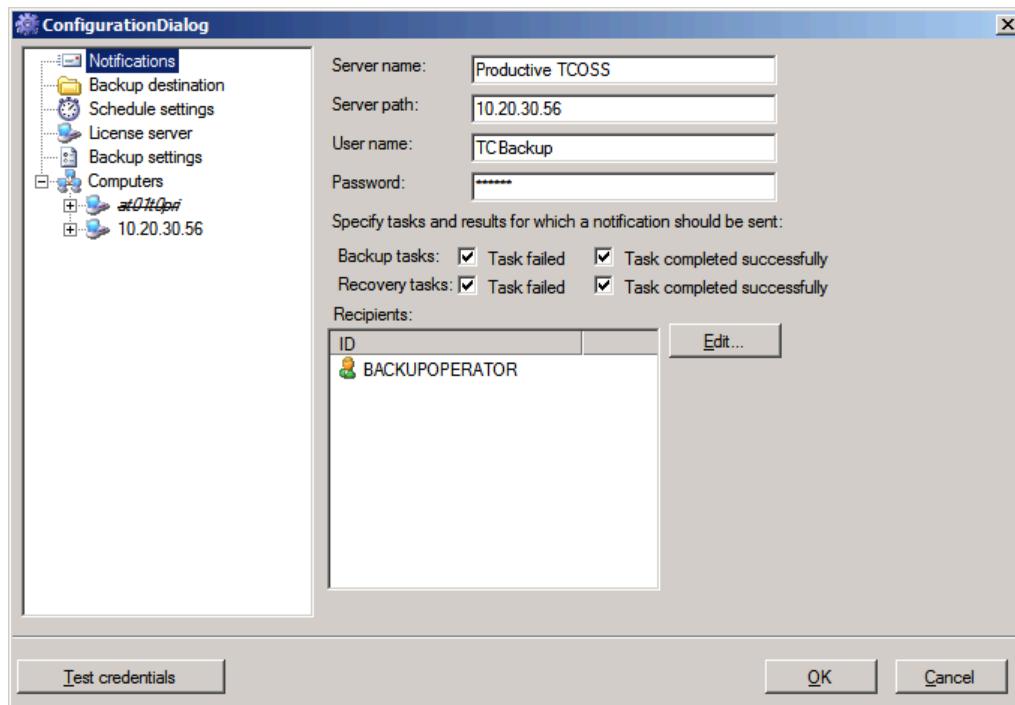
1. Before you can configure KCS Backup, make sure that the TCSRV service is running, including the KCSBackup process.



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.



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:

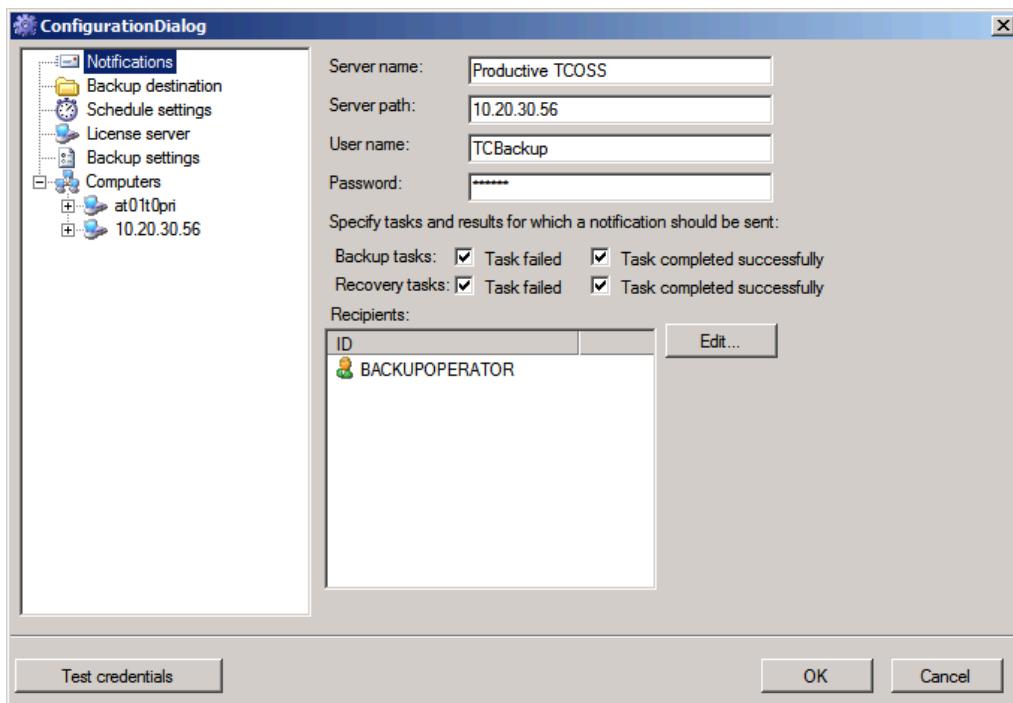
- [Managing Notifications](#)
- [Managing Backup](#)
- [Managing Licenses](#)
- [Managing Archive Settings](#)
- [Managing KCS Servers](#)
- [Managing Log Files](#)

## Managing Notifications

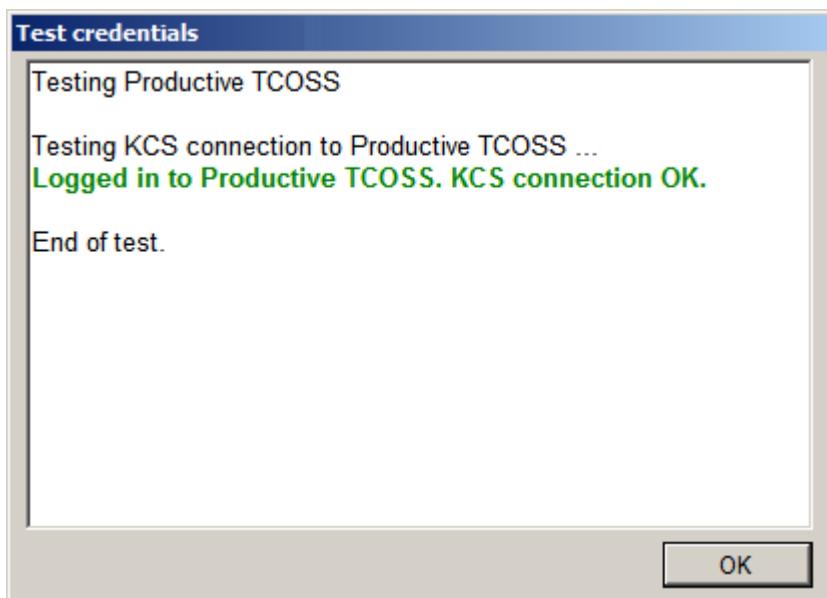
KCS Backup can be configured to send special notification messages to configured users about the outcome backup and recovery tasks.

To manage notifications

1. Select **Notifications** in the configuration menu.

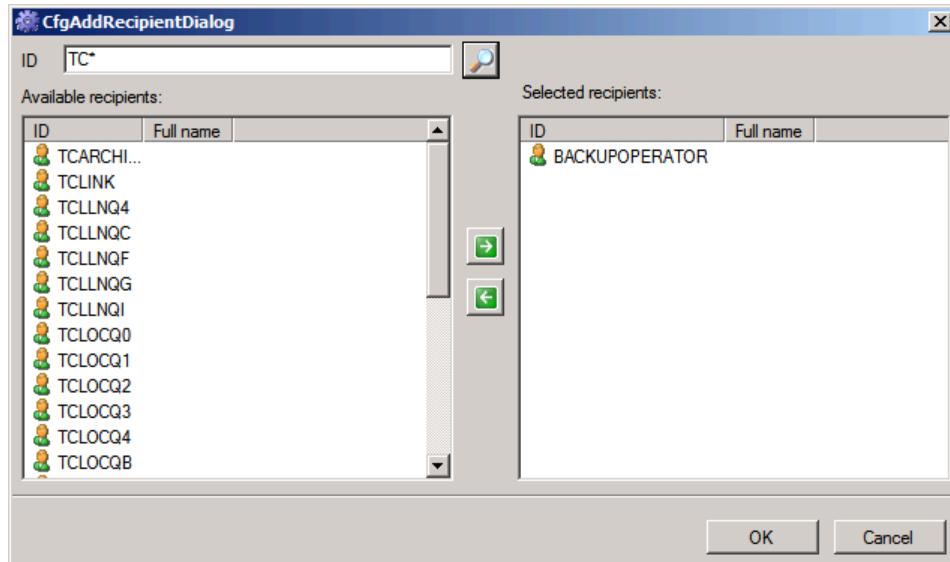


2. Type the login information of a KCS server. The specified user must have a valid TOPCALL address.
3. Click **Test credentials** to verify the login information.



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

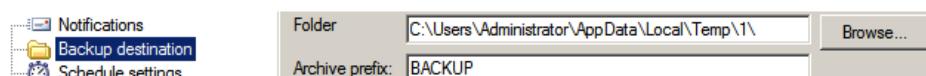
5. Click **Edit** to display a list of users. Select one or more users and click to add them to the list of recipients for notification emails. Click **OK**.



## Managing Backup Destination

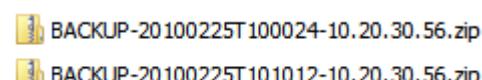
To manage the backup file name and folder:

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.

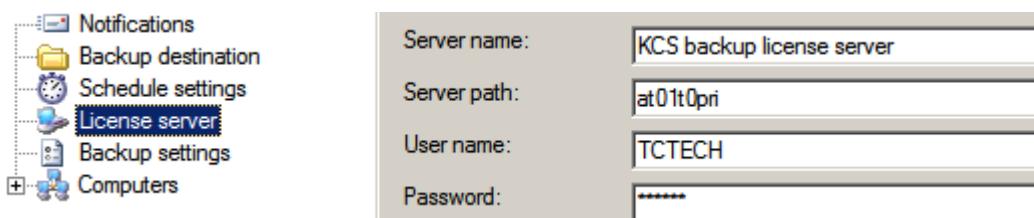
The full name of archive will be a concatenation of prefix, date, and time in the format prefix-YYYYMMDDTHHMMSS-computer, for example:



## Managing Licenses

To manage licenses:

1. Select **License server** in the configuration menu.



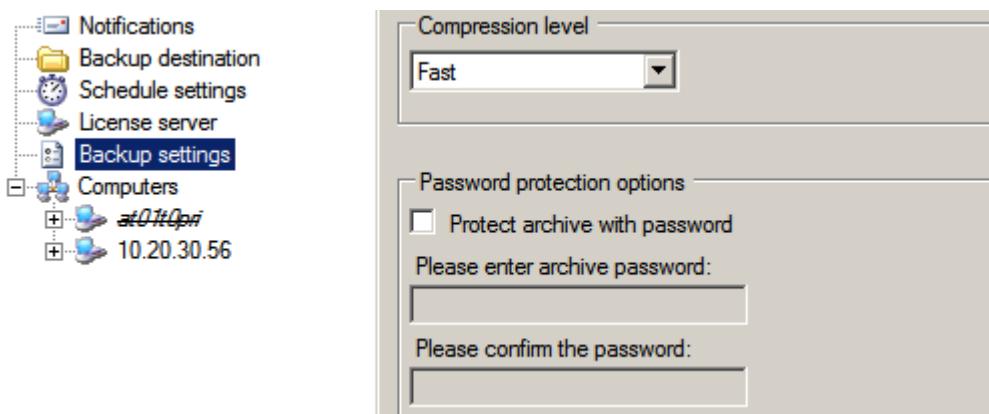
2. Type a descriptive server name, the KCS server path, KCS user name, and password.
3. Click **Test credentials** to verify the connection.



## Managing Archive Settings

To manage backup archive settings:

1. Select **Backup settings** in the configuration menu.

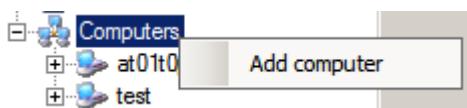


2. Select the **Compression level** of the ZIP archive that contains backed up data.
3. Optionally, you can protect the archive with password.

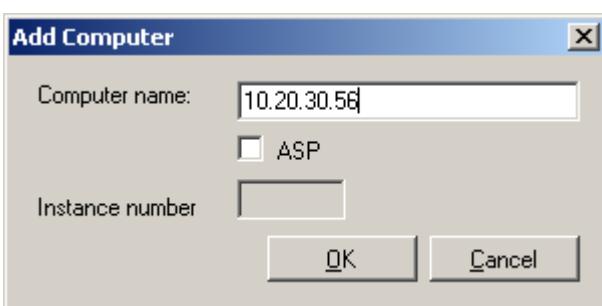
## Managing KCS Servers

To add a new KCS server for backup:

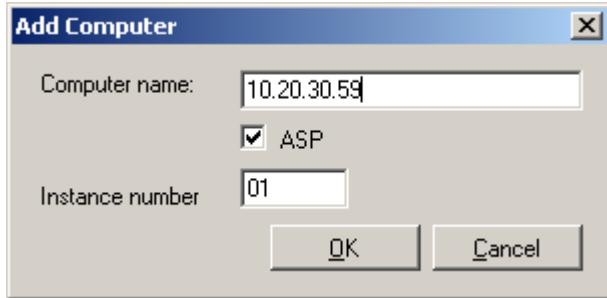
1. Right-click **Computers** in the configuration menu and select **Add computer**.



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



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



**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



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

|            |                   |
|------------|-------------------|
| User name: | KCS\Administrator |
| Password:  | *****             |

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

<computer>\<user>

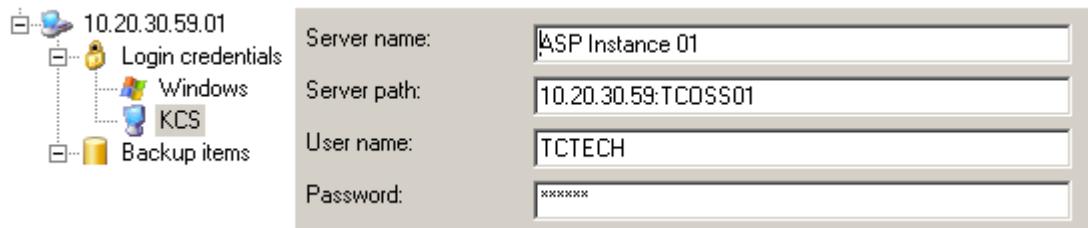
<domain>\<user>

4. Select **KCS**. Configure KCS login information

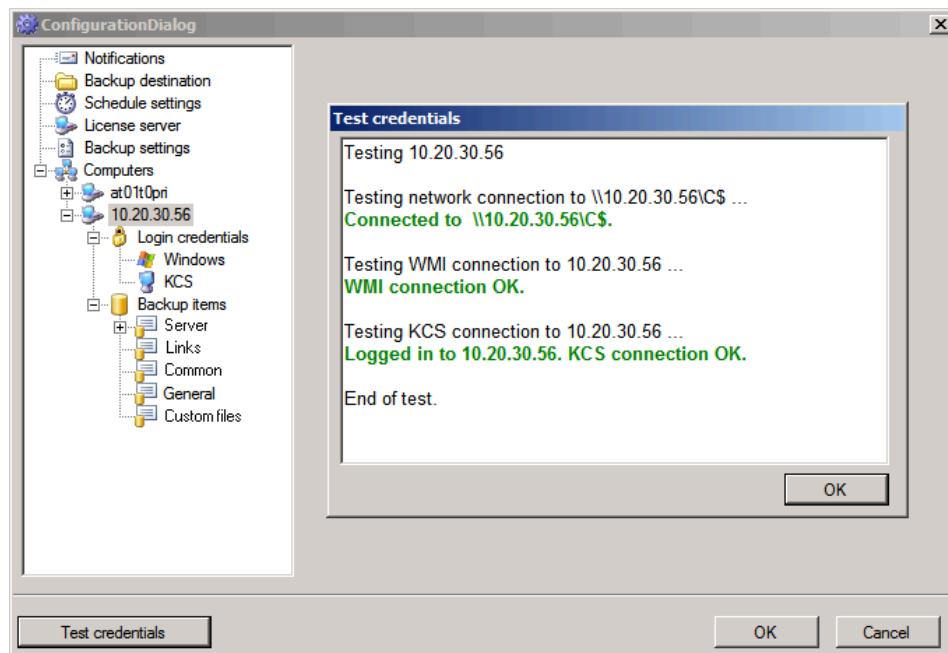
|              |                  |
|--------------|------------------|
| Server name: | Productive TCOSS |
| Server path: | 10.20.30.56      |
| User name:   | TCTECH           |
| Password:    | *****            |

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



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

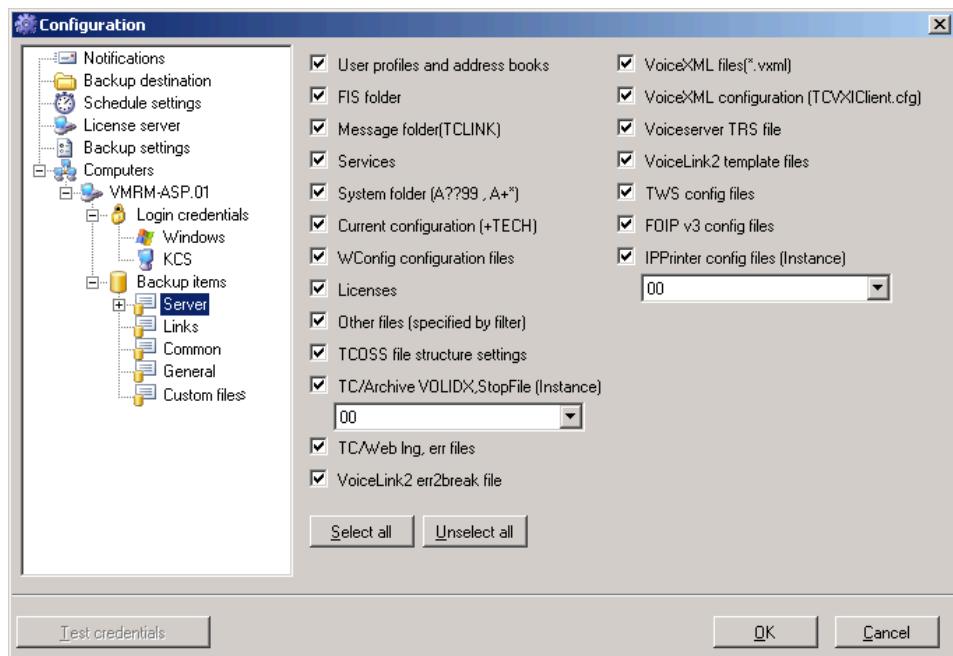


6. Click **OK**.

## To configure items for backup:

1. Expand **Computers** in the configuration menu and select the KCS server you want to configure.

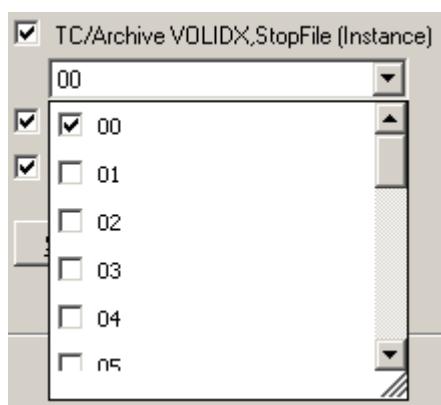
2. Expand **Backup items** and select Server. Check which KCS server components to back up.



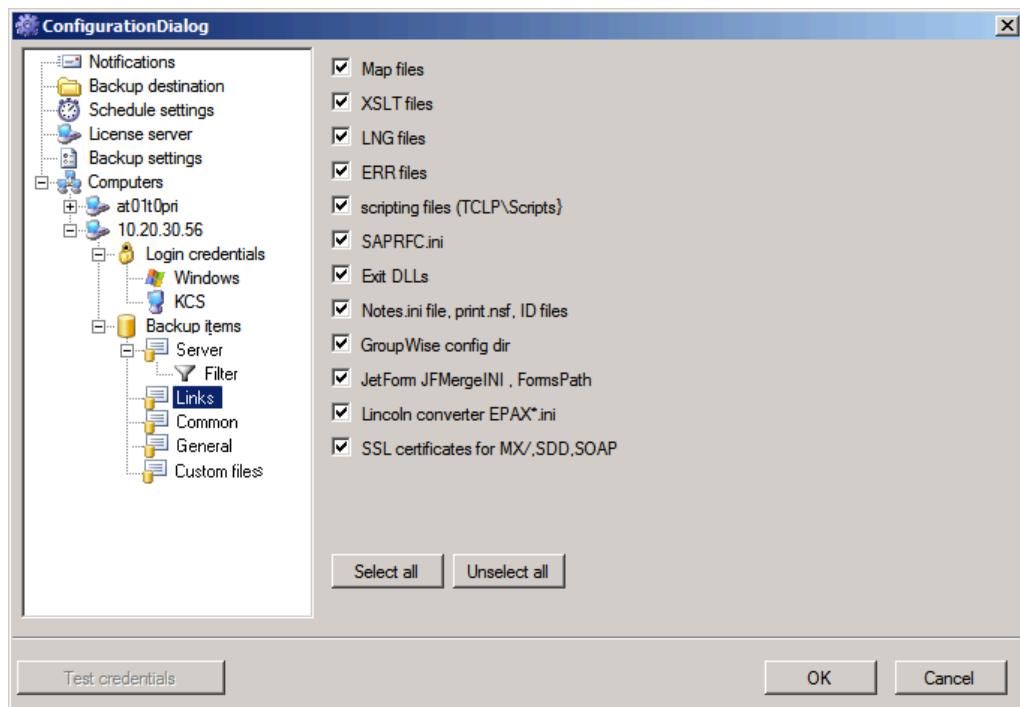
3. If you selected “Other files (specified by filter)”, expand TC/SP and select Filter. In the **Folder** field, select an existing folder, or type a folder (wild cards supported), e.g. “TCTECH” or “John\*”. In the **File** field, type the file name (wild cards supported). Click **Add** to add the folder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



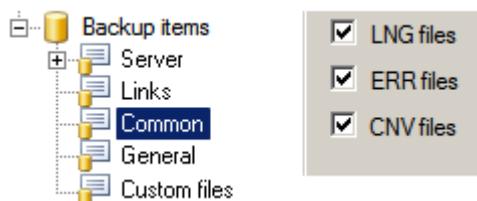
4. If you select TC/Archive or IPPrinter, you can select the instance number that you want to back up



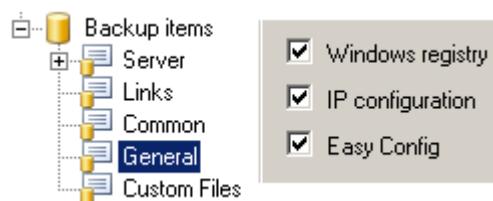
5. Select **Links**. Check which KCS link components to back up.



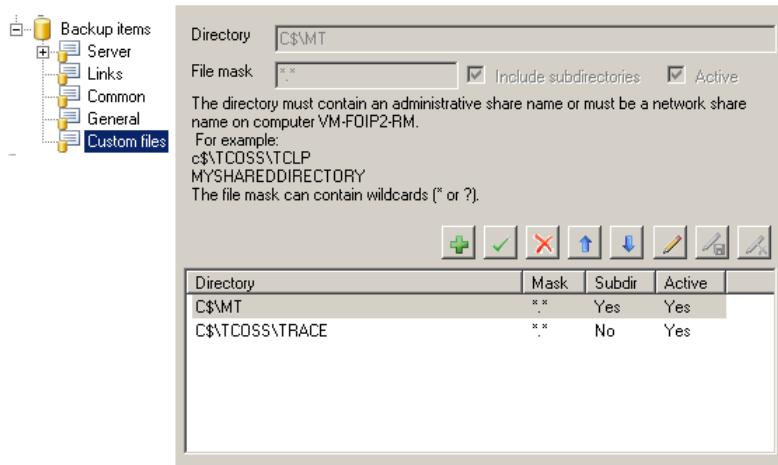
6. Select **Common**. Check which common KCS components to back up.



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.

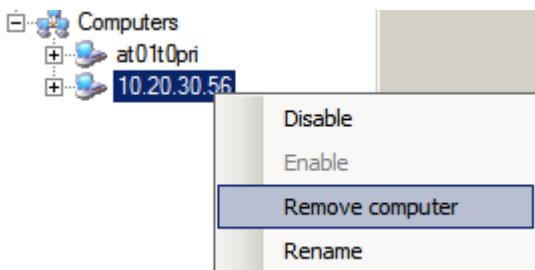
To change the order of the custom files configurations select an item in the list and then click the and buttons.

**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.

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.

## 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" />
```

## 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 |

## Chapter 4

# Backup

This section provides information about the Backup task.

## Creating a Backup Task

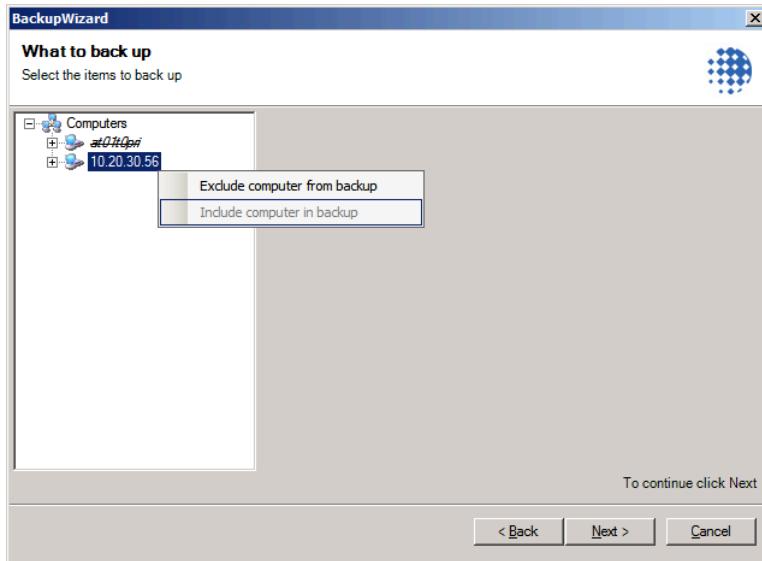
To create a backup task:

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**.

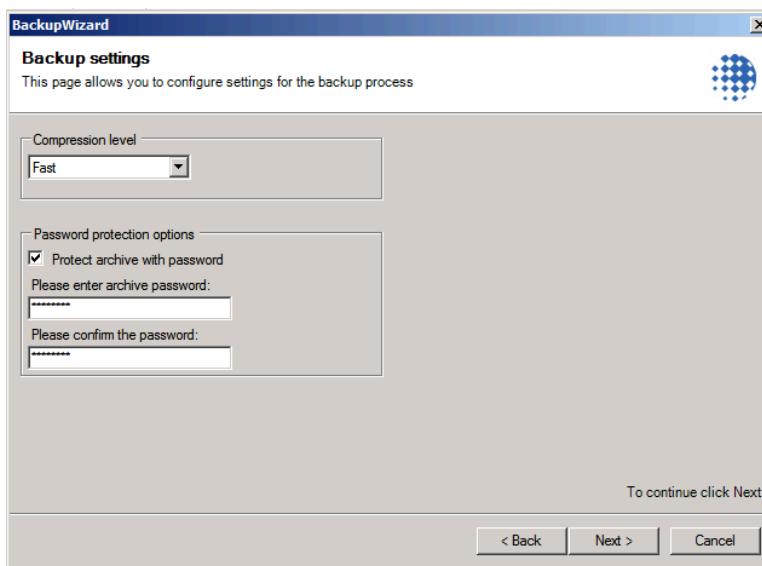


2. Decide which of the configured KCS servers you want to back up. To select a server for backup, right-click its name and select “Include computer in backup”. To omit a server from backup, right-click

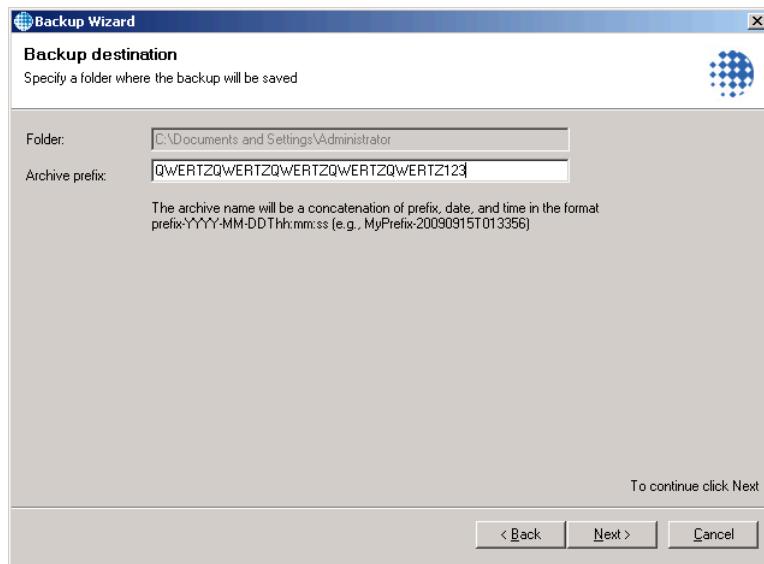
its name and select “Exclude computer from backup”. Only servers that have been added to the KCS Backup via the configuration tool are displayed. Please refer to chapter [Managing KCS Servers](#).



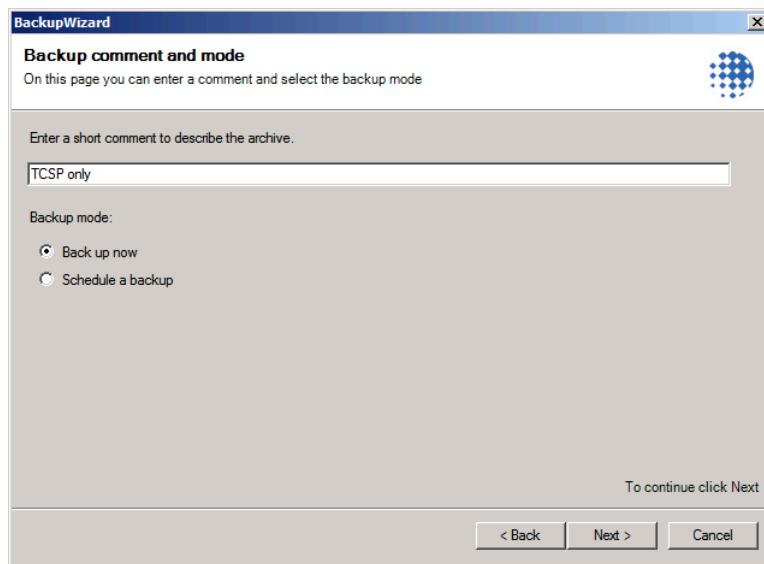
3. Expand the KCS server you want to back up. Review the “Login credentials” and “Backup items” options. Refer to chapter [Managing KCS Servers](#) if you need more information about the options. Click **Next**.
4. Review your backup archive settings. Refer to chapter [Managing Archive Settings](#) if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



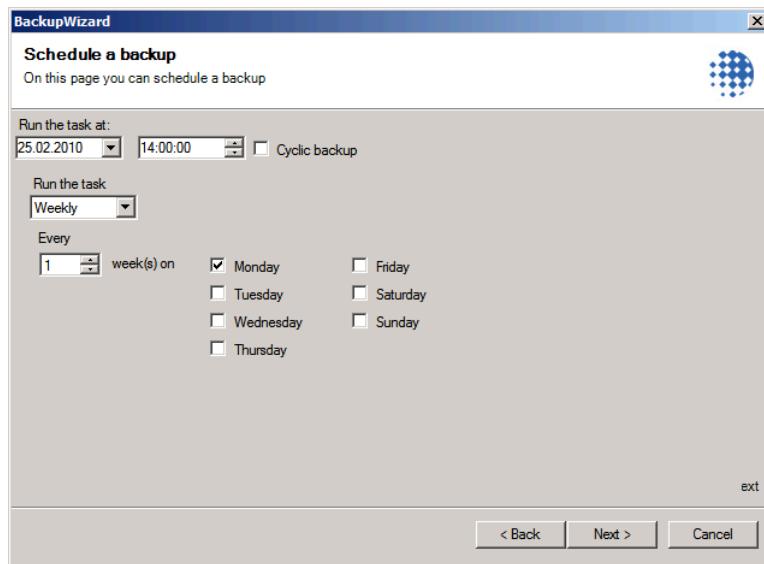
5. Review the destination folder and the archive prefix. Refer to chapter *Managing Backup Destination* if you need more information about the options. Click **Next**.



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



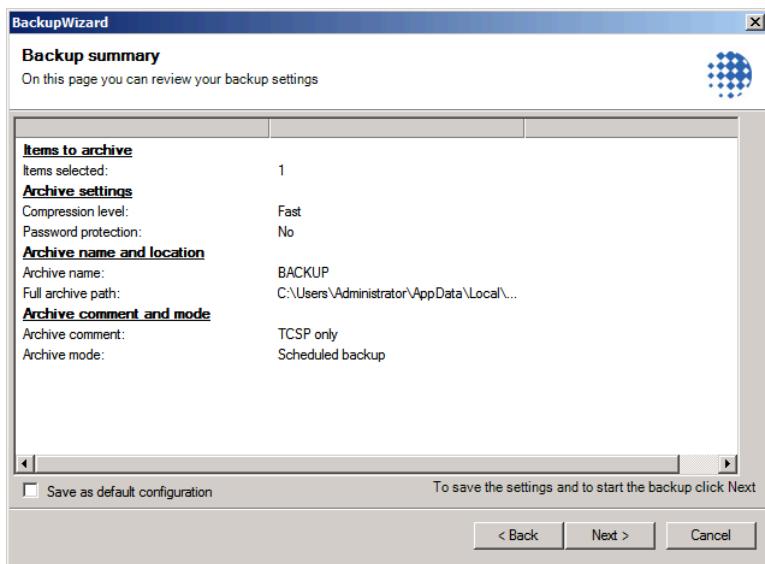
7. If you selected to schedule a backup in the previous step, you can configure when the backup should start. Also, you can configure periodical backups, running the backup daily, weekly, or monthly. Click **Next**.



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

| Backup Wizard   | Backup Wizard   |
|---|---|
| <b>Cyclic Backup</b><br>On this page you can specify the cyclic backup type   | <b>Cyclic Backup</b><br>On this page you can specify the cyclic backup type   |
| Cyclic backup type:<br><input checked="" type="radio"/> Depends on the number of archives<br><input type="radio"/> Depends on a period<br><br>Keep <input type="text" value="1"/> Archives until the first is overwritten | Cyclic backup type:<br><input type="radio"/> Depends on the number of archives<br><input checked="" type="radio"/> Depends on a period<br><br>Overwrite the archive after <input type="text" value="1"/> <input checked="" type="radio"/> Weeks<br><input type="radio"/> Months |

**9.** Review the backup summary. Click **Next**.

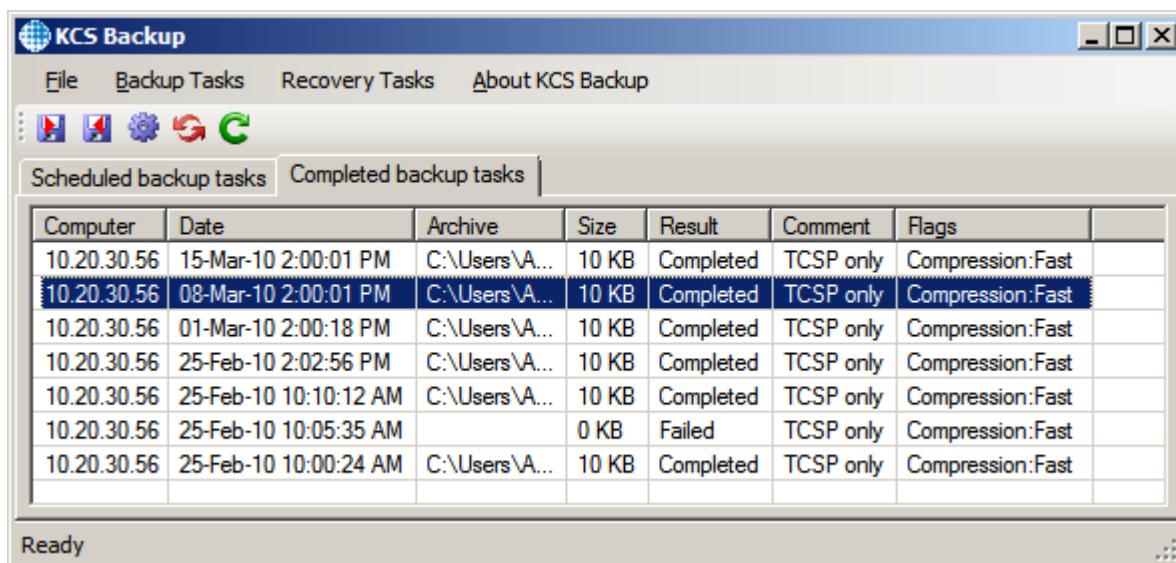


You can select **Save as default configuration** to use your current configuration of the backup task as the new default.

**10.** Click **OK** to create the backup task.

## 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.

## 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: .

## Chapter 5

# Recovery

This section provides information about recovering the KCS data.

## 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:

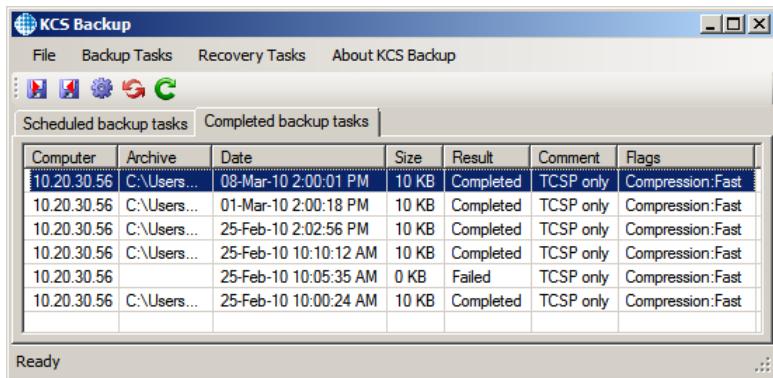
- TCOSS must be running
- License is not necessary
- All other KCS components must be shut down or inactive, especially links
- All other KCS components installed on other computers connected to target computer must be shut down

## Performing the Recovery

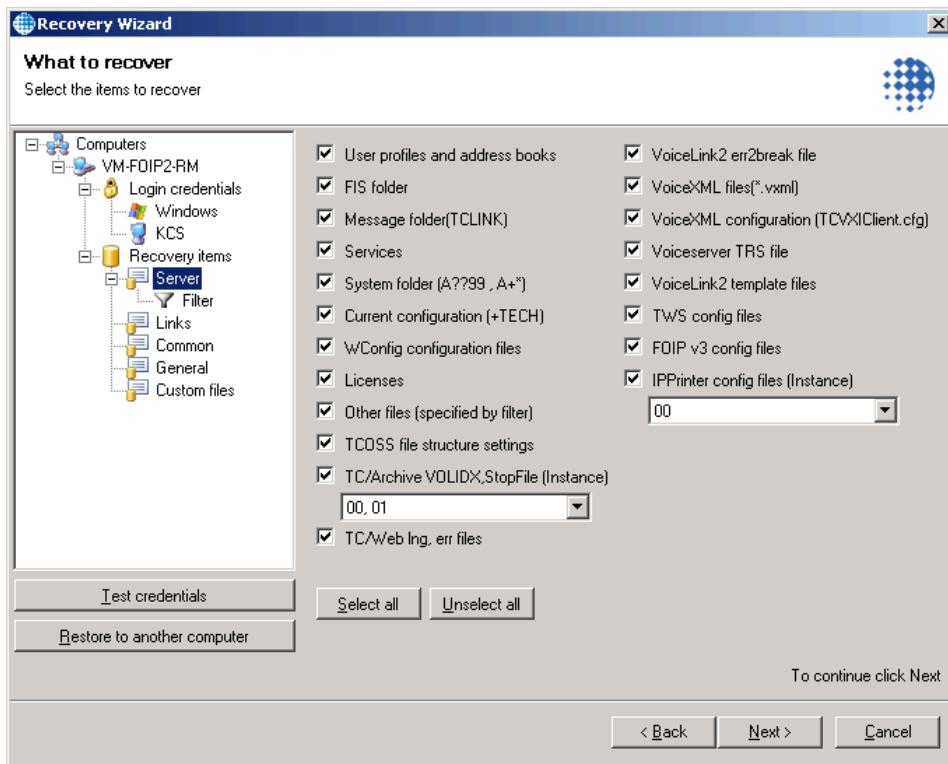
To recover from a backup:

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.



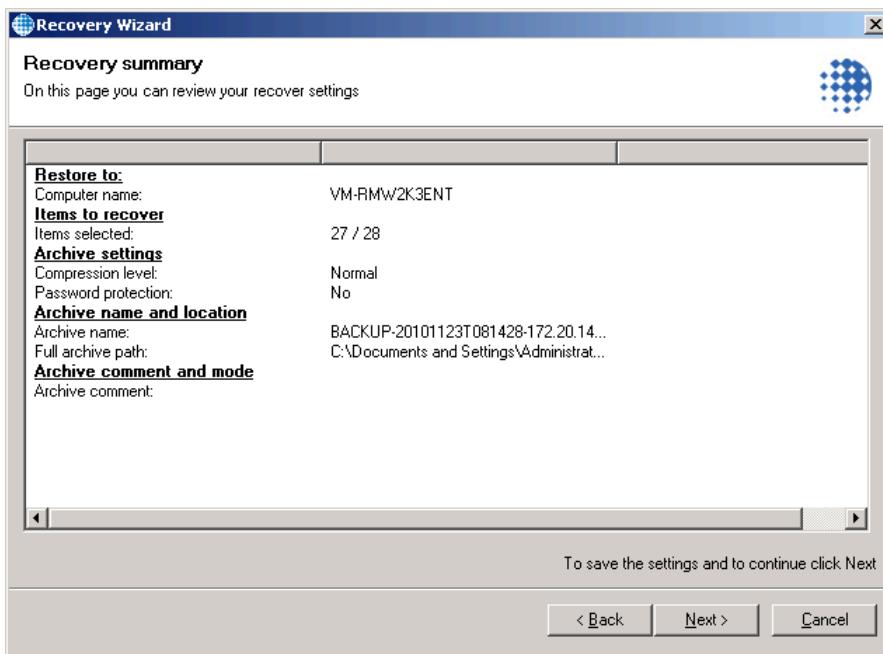
3. Start the **KCS Recovery Wizard**, either by clicking the menu icon or by selecting **Recover configuration and files** from the **Recovery Tasks** menu. Click **Next**.
4. Select which items do you want to recover.



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

## 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.

## Chapter 6

# Hints and Restrictions

This section provides hints and restrictions for using KCS Backup.

## Hints

This section provides hints for using KCS Backup.

### 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 are 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.
  - Make sure that WMI connection to the computer is successful.
  - 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 TCSRVR.

### 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.

## 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.

## Restrictions

This section provides the information of restrictions of KCS backup.

### 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.