Working with Predictive Diagnostics Data Files

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Working with Predictive Diagnostics Data Files

This document describes how to download and upload the data files you use in performing predictive diagnostics for your clients.

When viewed at a high level, working with data files is a two-part process. You first download the files from the Predictive Diagnostics Team to your laptop and then to your data collector. After you use these files to perform predictive diagnostics for a client, you upload them from your data collector to your laptop and then back to the Predictive Diagnostics Team, where they are then processed and analyzed.

To complete the downloading and uploading of data files, you use two different applications:

- ***Machine Analyst File Transfer*** is used to transfer data files between the Predictive Diagnostic Team and your laptop
- ***SKF Machine Analyst/Remote Route*** is used to transfer data files between your laptop and your data collector

To help you learn how to work with these applications, this document includes basic procedures you will use in each application. Specifically, this document is divided into the following sections:

Using Machine Analyst File Transfer

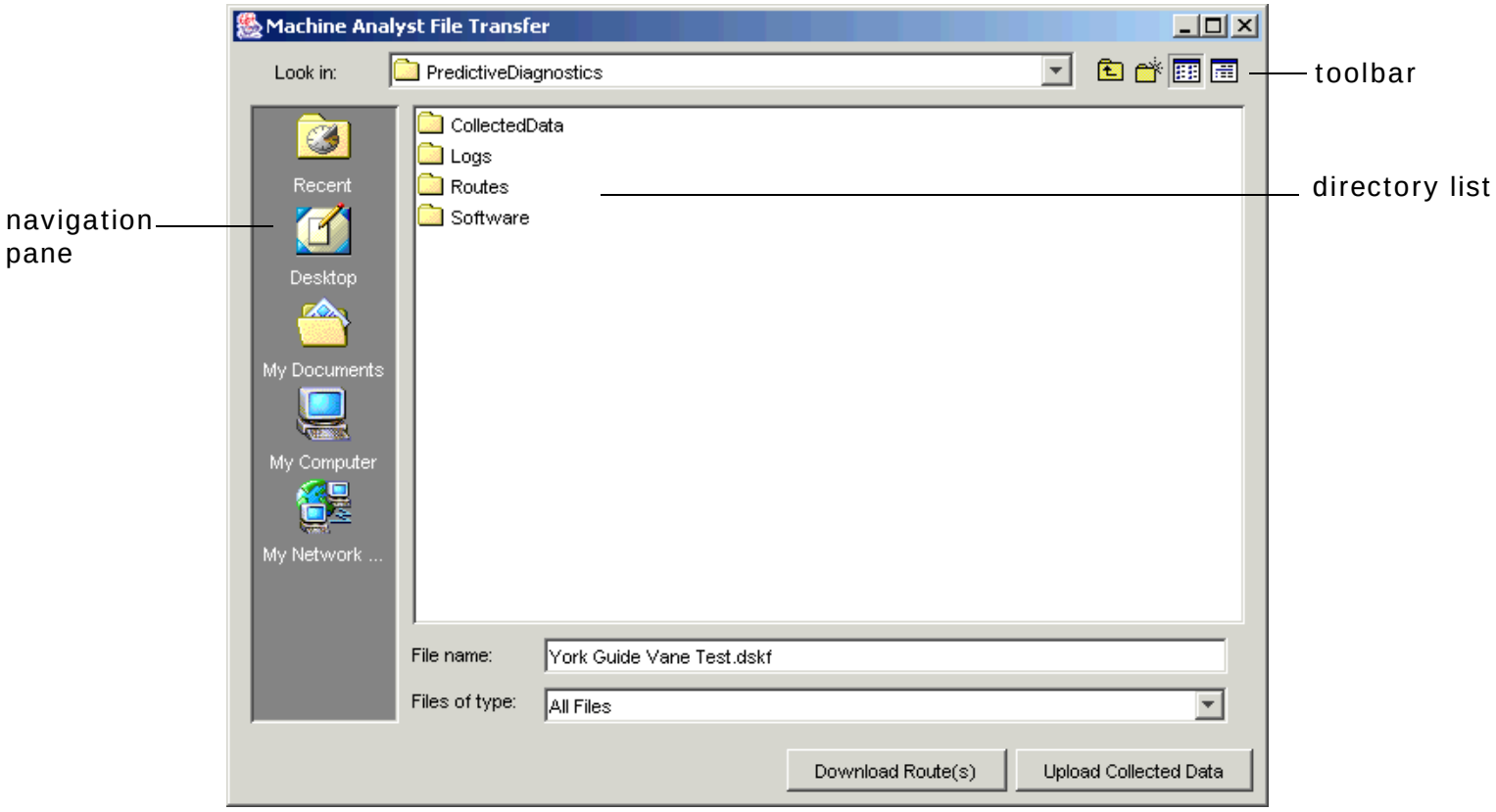
Machine Analyst File Transfer is the application you use to transfer data files between the Predictive Diagnostics Team and your laptop. Using this application is the first step in providing predictive diagnostic services for your client.

> ***Note:*** Before you can use Machine Analyst File Transfer to download or upload a data file, you need to have your JCI Global Directory user ID and password available.

Understanding the Machine Analyst File Transfer interface

When you start the Machine Analyst File Transfer (File Transfer) application, after you finish downloading your files, you see the application window. The main components of the application window are the toolbar, the navigation pane, and the directory list. Each of these components is described in greater detail in the following sections.

Machine Analyst File Transfer application window



Toolbar

The toolbar contains buttons that allow you to navigate through your laptop's directory structure, create a new folder, or change

the amount of detail displayed for a directory or folder. The following table describes the buttons available in the toolbar:

Button	Functionality
	Move up one level in your computer's directory structure.
	Create a new folder.
	View a list of items in a directory.
	View details (e.g., file type, size, etc.) about items in a directory.

Navigation pane

The navigation pane displays icons that allow you to navigate to directories on your computer or network. For purposes of uploading and downloading files, however, you do not need to use any of the icons in the navigation pane.

Directory list

The directory list displays data files in a selected directory. By default, File Transfer displays four folders when you start the application.

The following table describes the folders displayed in the directory list.

Folder	Contents
CollectedData	All data files that you plan to upload from your laptop to the Predictive Diagnostics Team.
Logs	A text document that is generated each time you download or upload data files. The technical support team uses this file to track problems that may occur during the transfer process.
Routes	All data files that you have downloaded from the Predictive Diagnostics Team to your laptop.
Software	Executable for the File Transfer application.

Downloading data files from the Predictive Diagnostics Team to your laptop

Before you can perform predictive diagnostics for a client, you need to download the appropriate data files from the Predictive Diagnostics Team to your computer. The following procedure describes how to do this.

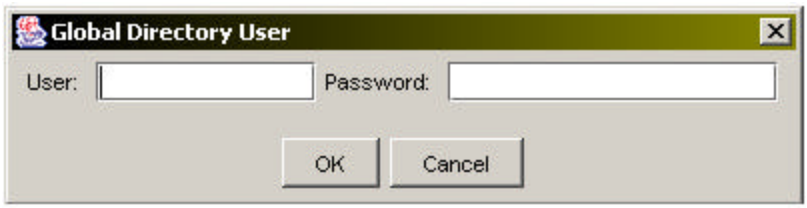
> ***Note:*** Before you can use this procedure, you need to have your JCI Global Directory user ID and password available.

To download a data file to your laptop, perform the following steps:

1. Start the File Transfer application.

   Result: File Transfer opens the Global Directory User dialog box.

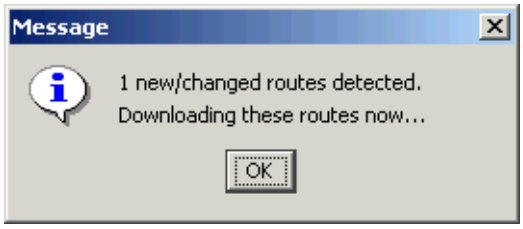
Global Directory User dialog box



2. In the User field, type your JCI Global Directory user ID.
3. In the Password field, type your JCI Global Directory password.
4. Click the OK button.

   Result: File Transfer displays a Message dialog box indicating how many routes are available for downloading.

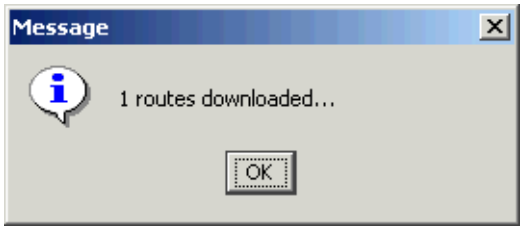
Message dialog box



5. Click the OK button.

   Result: While File Transfer downloads the file(s) to your laptop, a small window displays the routes being downloaded and the activity status. The download may take several minutes if there are a lot of routes. When the download is complete, File Transfer displays a Message dialog box indicating how many routes were downloaded.

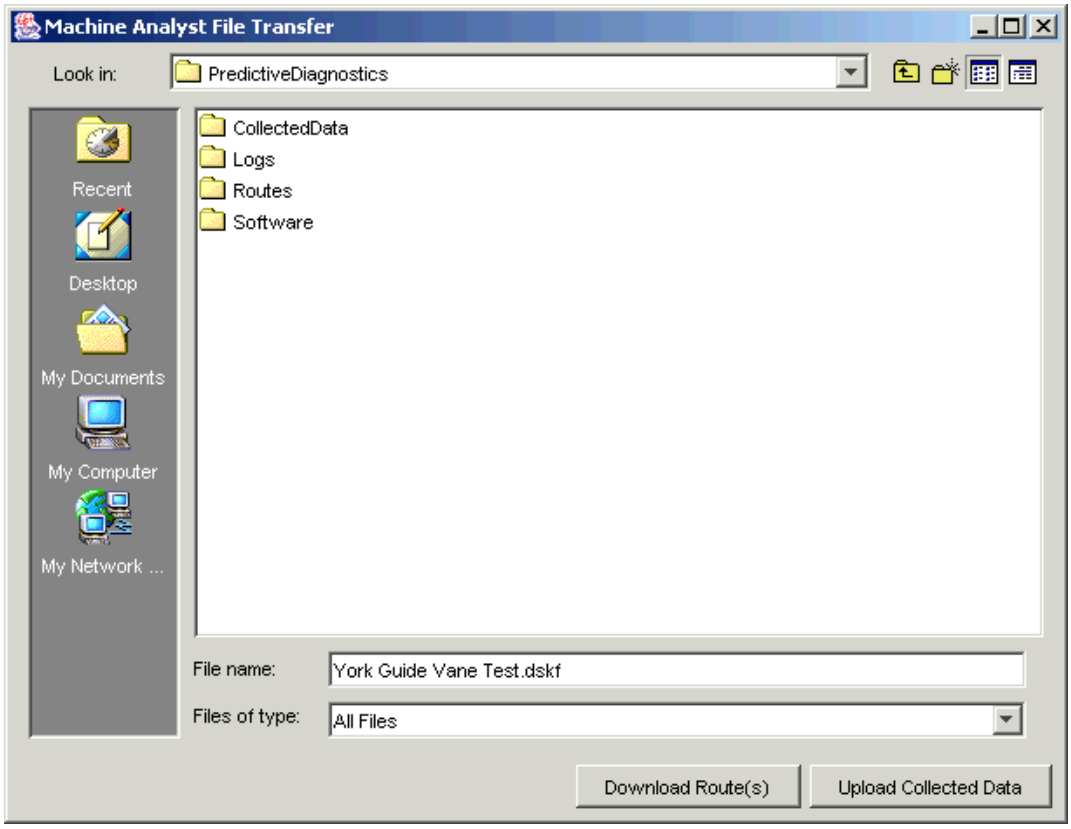
Message dialog box



6. Click the OK button.

   Result: File Transfer closes the Message dialog box and opens the application window.

Machine Analyst File Transfer application window



7. At this point, you do not need to do anything further. To close the File Transfer application, click the X (Close) button.

Uploading data files from your laptop to the Predictive Diagnostics Team

After you have completed predictive diagnostics services for a client, your last step is to transfer the data files from your laptop to the Predictive Diagnostics Team, where the files will be analyzed and processed.

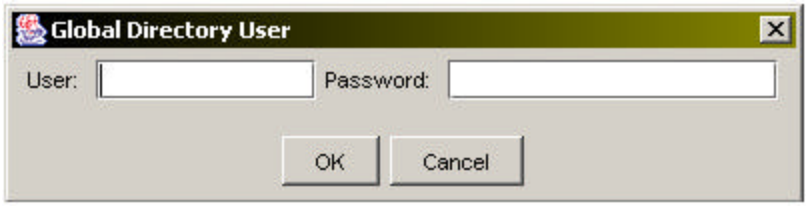
> ***Note:*** Before you can use this procedure, you need to have your JCI Global Directory user ID and password available.

To upload a data file to the Predictive Diagnostics team, perform the following steps:

1. Start the File Transfer application.

   Result: File Transfer opens the Global Directory User dialog box.

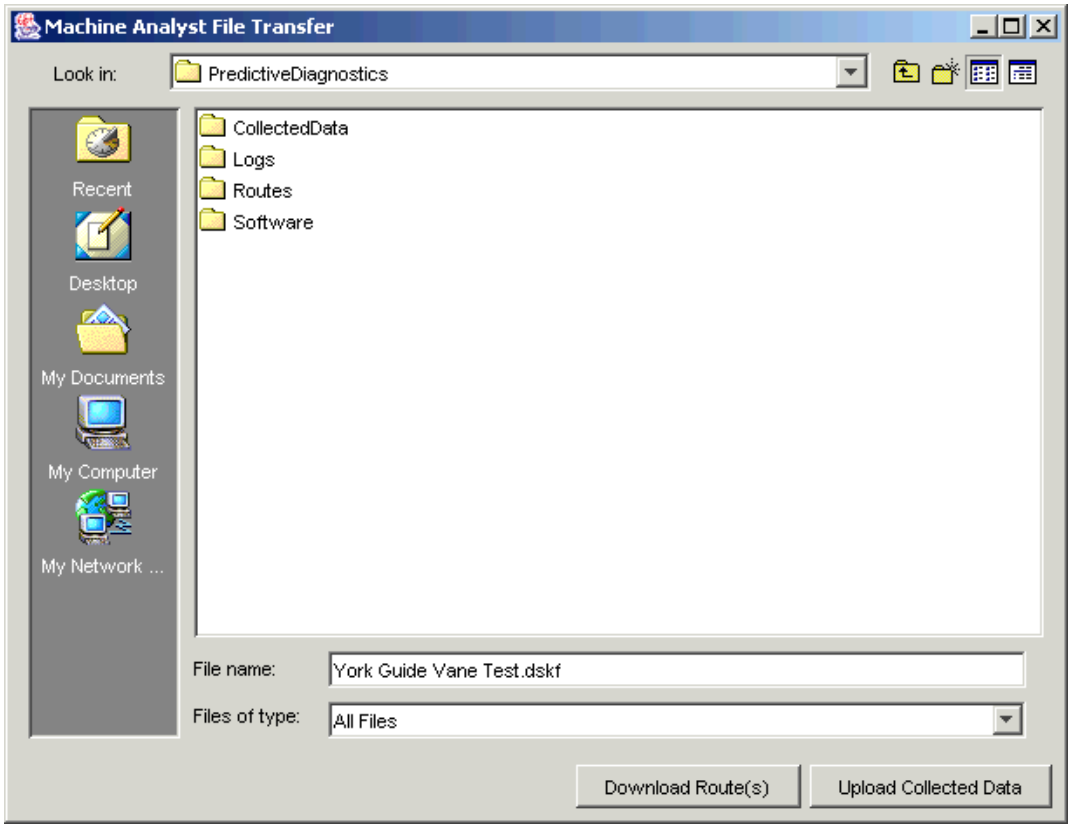
Global Directory User dialog box



2. In the User field, type your JCI Global Directory user ID.
3. In the Password field, type your JCI Global Directory password.
4. Click the OK button.

   Result: File Transfer opens the application window.

Machine Analyst File Transfer application window



5. In the directory window, double-click the CollectedData directory.

   Result: File Transfer displays a list of all of the data files stored on your data collector.

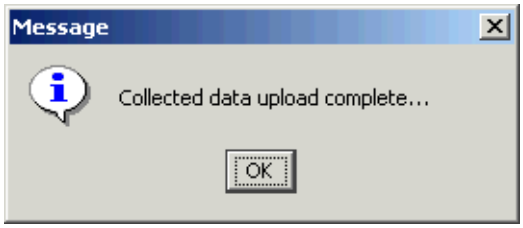
6. Do one of the following:

   - To upload only one data file, click that file.
   - To upload multiple, non-adjacent data files, press and hold Ctrl + Alt, and then click each data file you want to upload.
   - To upload all of the data files, press and hold Shift, and then click the first and last data files in the list.

7. Click the Upload Collected Data button.

   Result: File Transfer uploads the file(s) to your laptop. When all of the files have been uploaded, File Transfer displays a Message dialog box indicating that the upload was completed.

Message dialog box



8. Click the OK button.

   Result: File Transfer closes the Message dialog box and returns you to the application window.

9. Do one of the following:

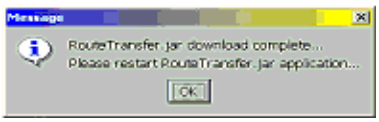
   - To upload additional files to the Predictive Diagnostics Team, repeat steps 5 through 7.
   - To close the File Transfer application, click the X (Close) button.

Responding to error messages in Machine Analyst File Transfer

This section describes an error message you may encounter when you use File Transfer.

When File Transfer is installed on your laptop, you may encounter the following error message the first time you start the application.

Message dialog box



When this dialog box appears, do the following:

1. Click the OK button to close the dialog box.
2. Restart the application.

Using SKF Machine Analyst/Remote Route

After you download data files from the Predictive Diagnostics Team to your laptop, you use SKF Machine Analyst/Remote Route to transfer files between your laptop and your data collector. Before you can do this, however, you need to ensure that a proper connection exists between your data collector, a battery charger/support module, and your laptop. The following table describes how these connections should be made:

To connect the…	To the...	Use this cable…
Microlog	Battery charger/ support module	50077A (with plastic towards the Microlog)
Battery charger/support module	Computer	50080-CE

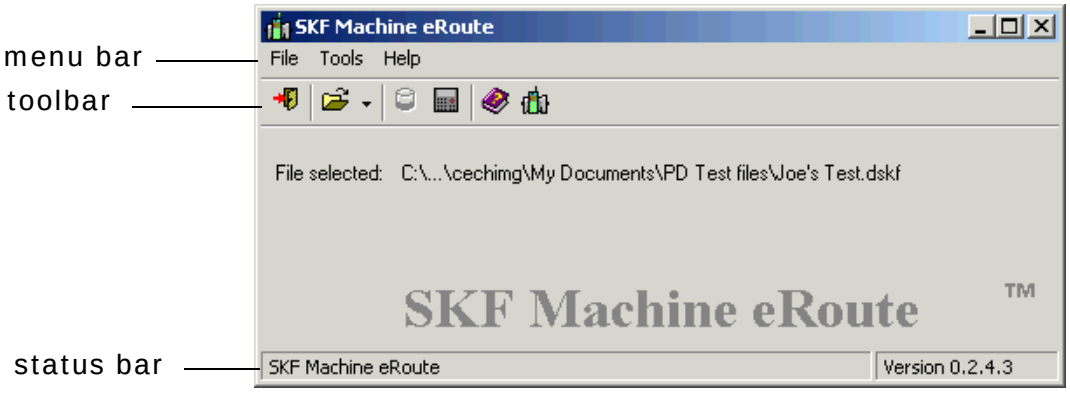
OR

To connect the…	To the...	Use this cable…
Microlog	Computer	A null modem cable

Understanding the SKF Machine Analyst/Remote Route interface

When you start the SKF Machine Analyst/Remote Route (Remote Route) application, the first thing you see is the application window. The main components of the application window are the menu bar, the toolbar, and the status bar. Each of these components is described in greater detail in the following sections.

SKF Machine eRoute application window



Menu bar

The Menu bar contains the File, Tools, and Help menus. Each of these menus contains commands that you use to perform various tasks in Remote Route. The following table describes the commands available in each menu:

Menu	Command	Functionality
File	Open	Open a data file for downloading or uploading.
	Re-open	View a list of recently opened download files.
	Exit	Close the application.

Menu	Command	Functionality
Tools	Transfer	Transfer data to and from the data collector. Also view status information and communication parameters.
	Logs	View transaction logs for your transfer files.
Help	Help	Access Help for the application.
	Search for help on…	Search the help file by key words.
	How to use Help	View instructions on how to use the help file.
	About	View version information about the application.

Toolbar

The toolbar contains buttons that give you quick access to some of the same commands available in the menu bar. The following table describes the buttons available in the toolbar:

Button	Functionality
	Exit the application.
	Open a data file for downloading or uploading.

Button	Functionality
	View transaction logs for your transfer files.
	Transfer data to and from the data collector.
	Access Help for the application.
	View version information about the application.

Status bar

The status bar displays information about each menu command or toolbar button. This information is displayed when the cursor hovers over a menu command or toolbar button. The status bar also displays the application's version number.

Clearing data files from your data collector

Before you download data files for a particular client, it is always a good idea to clear any data files that may already be loaded on your data collector. This ensures that there is enough memory available for the next download, and it also eliminates any possible confusion about which data files to use once you arrive at a client's site.

The following procedure describes how to clear data files from your data collector. Keep in mind that using the Clear function clears ***all*** data from the data collector, including Sets, Machines, Points, and Routes.

To clear data files from your data collector, perform the following steps:

1. Verify that your data collector is turned on and properly connected to your laptop.

   Note: For instructions on how to connect, set up, and use a data collector, refer to one of the following Technical Reference Guides:

   - Fan and Pump Vibration, Alignment and Balancing
   - Chiller Vibration and Current Analysis

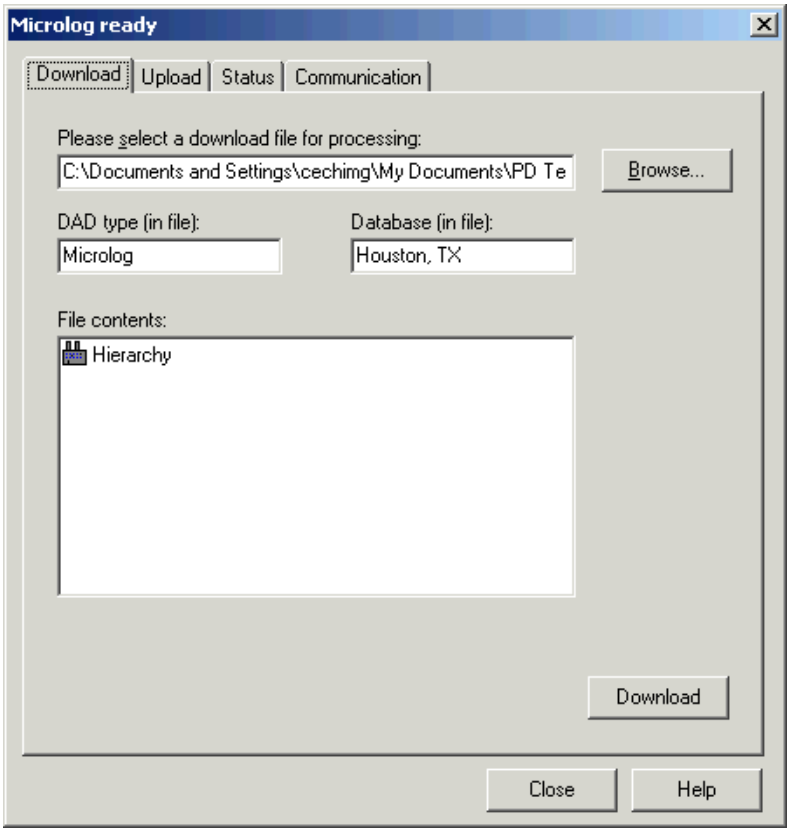
2. Start the Remote Route application.

3. Click the Transfer toolbar button.

   Result: Remote Route opens the Transfer dialog box (Download tab selected) and automatically fills information in the DAD type (in file) and Database (in file) fields.

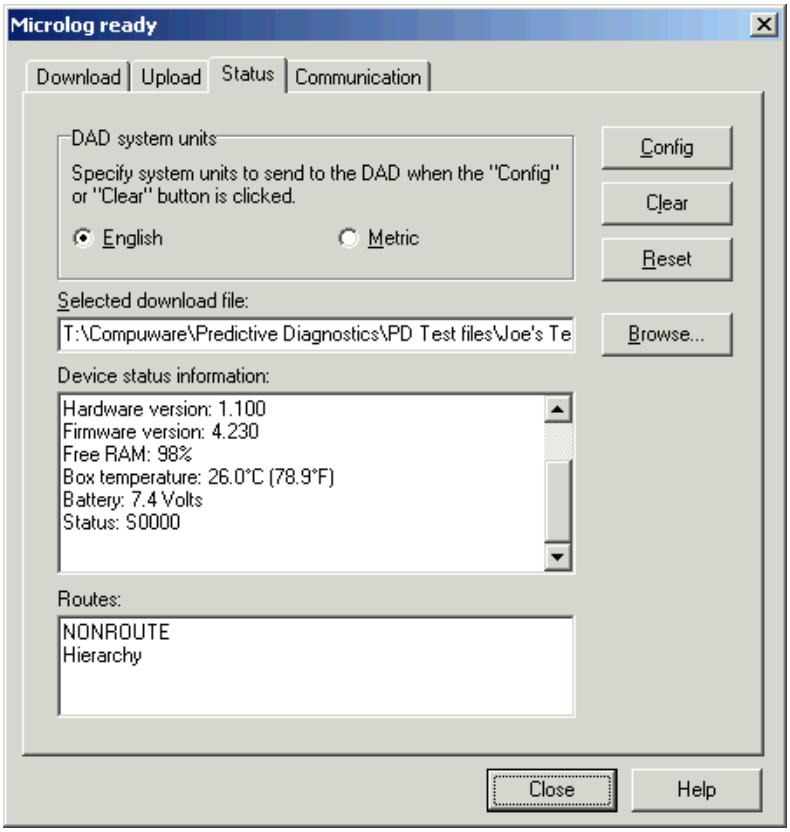
   Note: The title of this dialog box changes to Microlog ready once Remote Route detects the data collector.

Microlog ready dialog box Download tab



4. Click the Status tab.

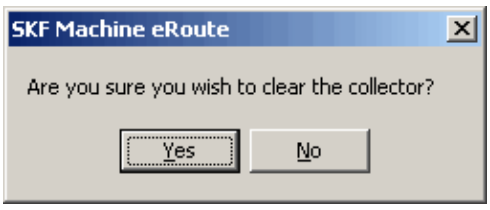
Microlog ready dialog box Status tab



5. Click the Clear button.

   Result: Remote Route displays an SKF Machine eRoute dialog box asking whether you are sure you want to clear the data collector.

SKF Machine eRoute dialog box



6. Click the Yes button.

   Result: Remote Route closes the dialog box and clears all of the data files from your data collector.

7. Continue with one of the following procedures:

   - “Configuring your data collector” on page 25
   - “Resetting your data collector” on page 29
   - “Downloading data files from your laptop to your data collector” on page 33
   - “Uploading data files from your data collector to your laptop” on page 37

8. When you are finished working in Remote Route, do the following:

   - Click the Close button to close the Microlog ready dialog box.
   - Click the Exit toolbar button to close the Remote Route application window.

Configuring your data collector

If you need to change databases, or update the data collector's internal clock, Remote Route allows you to make these changes using the Config function. Using this function updates the data collector's status to match that of your laptop.

To configure your data collector, perform the following steps:

1. Verify that your data collector is turned on and properly connected to your laptop.

   Note: For instructions on how to connect, set up, and use a data collector, refer to one of the following Technical Reference Guides:

   - Fan and Pump Vibration, Alignment and Balancing
   - Chiller Vibration and Current Analysis

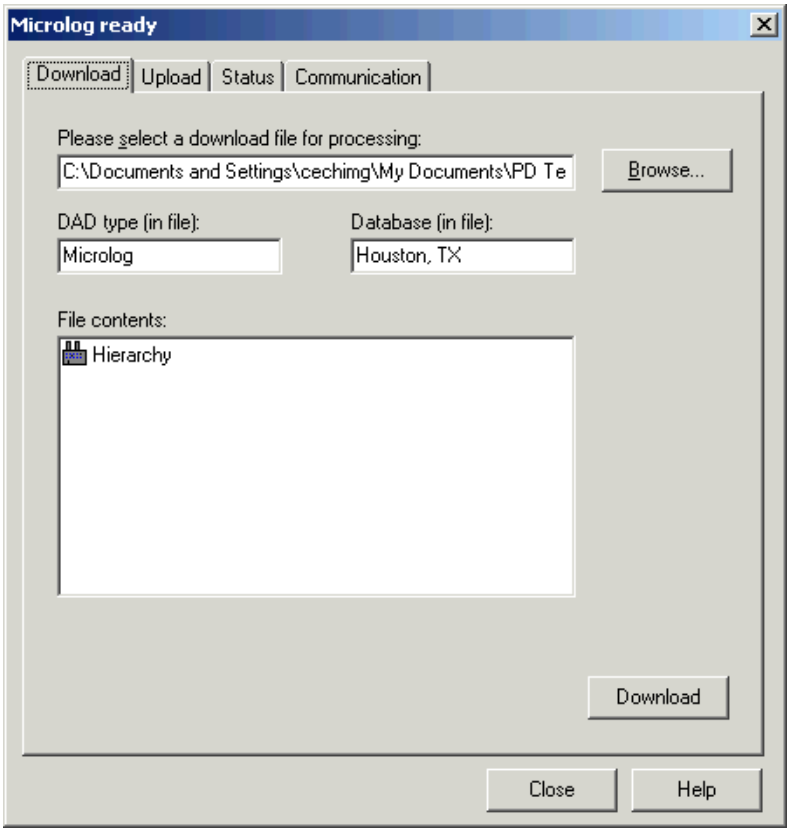
2. Start the Remote Route application.

3. Click the Transfer toolbar button.

   Result: Remote Route opens the Transfer dialog box (Download tab selected) and automatically fills information in the DAD type (in file) and Database (in file) fields.

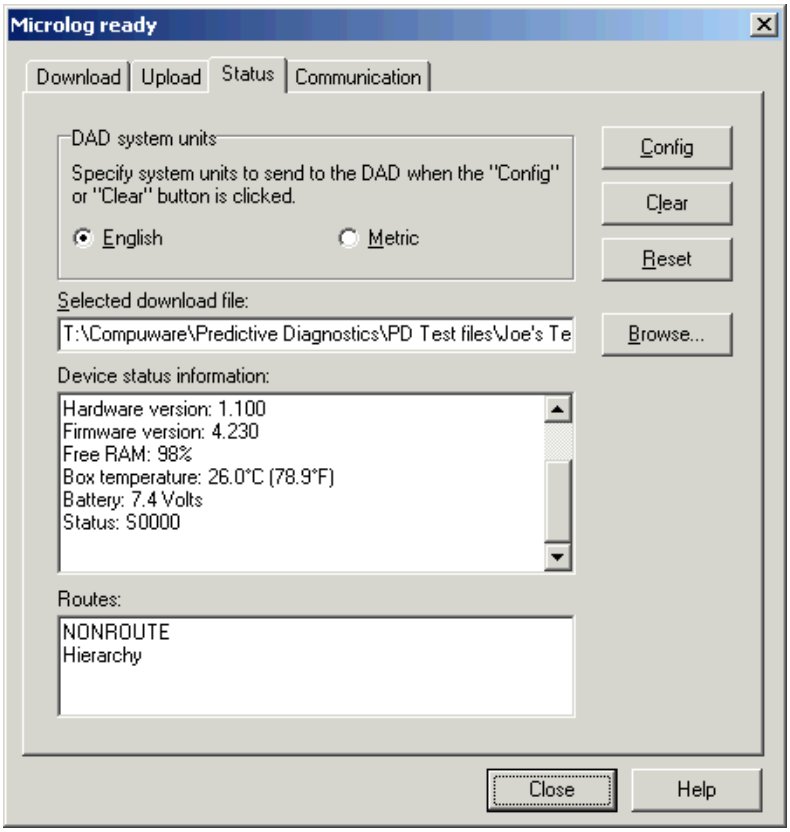
   Note: The title of this dialog box changes to Microlog ready once Remote Route detects the data collector.

Microlog ready dialog box Download tab



4. Click the Status tab.

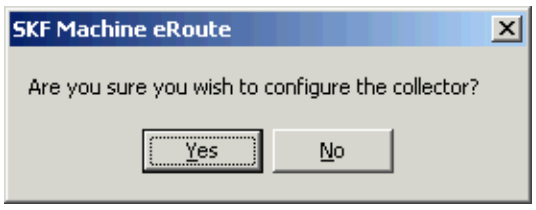
Microlog ready dialog box Status tab



5. Click the Config button.

   Result: Remote Route opens an SKF Machine eRoute dialog box asking whether you are sure you want to configure the data collector.

SKF Machine eRoute dialog box



6. Click the Yes button.

   Result: Remote Route closes the dialog box and configures the data collector.

7. Continue with one of the following procedures:

   - “Clearing data files from your data collector” on page 21
   - “Resetting your data collector” on page 29
   - “Downloading data files from your laptop to your data collector” on page 33
   - “Uploading data files from your data collector to your laptop” on page 37

8. When you are finished working in Remote Route, do the following:

   - Click the Close button to close the Microlog ready dialog box.
   - Click the Exit toolbar button to close the Remote Route application window.

Resetting your data collector

If you collect data for a particular route, and then decide you need to collect data on it again, you can reset your data collector. This deletes the data you collected for the route, but leaves the route itself within the data collector. You can now easily collect new data for the route.

To reset your data collector, perform the following steps:

1. Verify that your data collector is turned on and properly connected to your laptop.

   Note: For instructions on how to connect, set up, and use a data collector, refer to one of the following Technical Reference Guides:

   - Fan and Pump Vibration, Alignment and Balancing
   - Chiller Vibration and Current Analysis

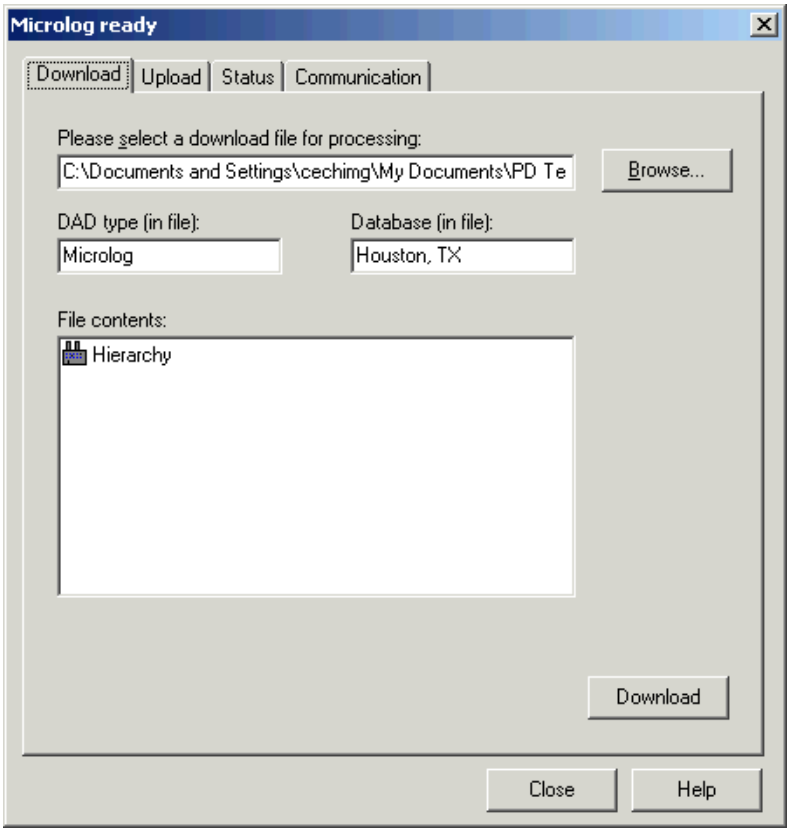
2. Start the Remote Route application.

3. Click the Transfer toolbar button.

   Result: Remote Route opens the Transfer dialog box (Download tab selected) and automatically fills information in the DAD type (in file) and Database (in file) fields.

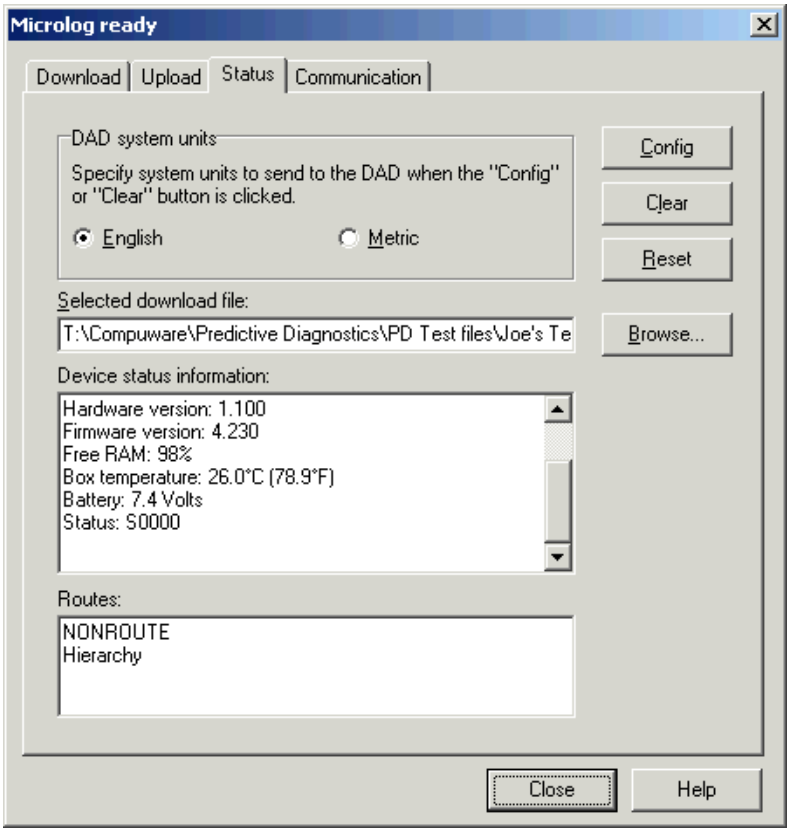
   Note: The title of this dialog box changes to Microlog ready once Remote Route detects the data collector.

Microlog ready dialog box Download tab



4. Click the Status tab.

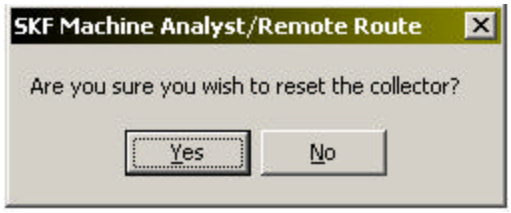
Microlog ready dialog box Status tab



5. Click the Reset button.

   Result: Remote Route opens the SKF Machine Analyst/Remote Route dialog box.

SKF Machine Analyst/Remote Route dialog box



6. Click the Yes button.

   Result: Remote Route closes the dialog box and resets the data collector.

7. Continue with one of the following procedures:

   - “Clearing data files from your data collector” on page 21
   - “Configuring your data collector” on page 25
   - “Downloading data files from your laptop to your data collector” on page 33
   - “Uploading data files from your data collector to your laptop” on page 37

8. When you are finshed working in Remote Route, do the following:

   - Click the Close button to close the Microlog ready dialog box.
   - Click the Exit toolbar button to close the Remote Route application window.

Downloading data files from your laptop to your data collector

Before you can perform predictive diagnostics for a client, you need to download data files from your laptop to your data collector. These files contain client information that the data collector uses during the predictive diagnostics process.

To download a data file, perform the following steps:

1. Verify that your data collector is turned on and properly connected to your laptop.

   Note: For instructions on how to connect, set up, and use a data collector, refer to one of the following Technical Reference Guides:

   - Fan and Pump Vibration, Alignment and Balancing
   - Chiller Vibration and Current Analysis

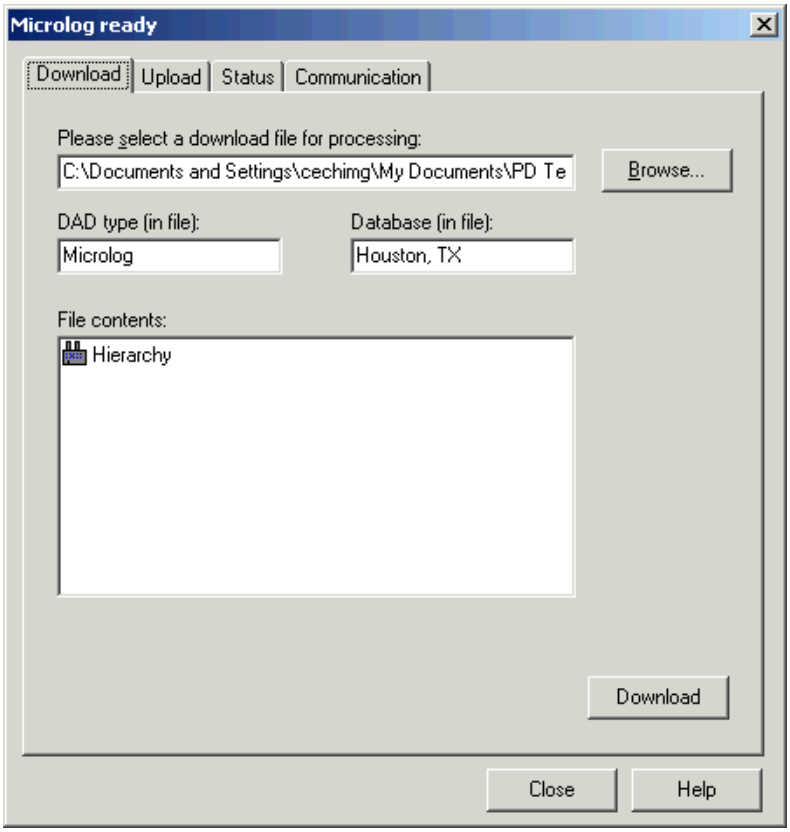
2. Start the Remote Route application.

3. Click the Transfer toolbar button.

   Result: Remote Route opens the Transfer dialog box (Download tab selected) and automatically fills information in the DAD type (in file) and Database (in file) fields.

   Note: The title of this dialog box changes to Microlog ready once Remote Route detects the data collector.

Microlog ready dialog box Download tab



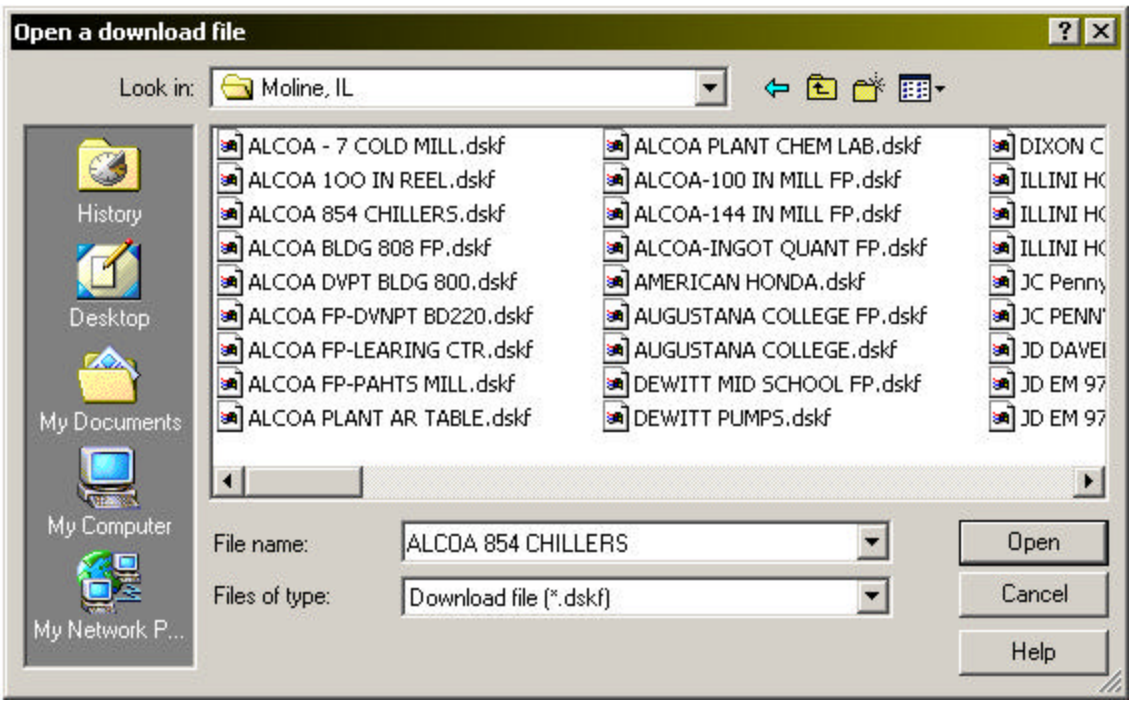
4. To locate the file you want to download, click the Browse button.

   Result: Remote Route opens the Open a download file dialog box.

   Note: All download files (.dskf) are located in the following directory:

   C:/PredictiveDiagnostics/Routes/

Open a download file dialog box



5. Click the down arrow next to the Look in field and navigate to the location that contains the appropriate download file for your customer.

   Note: All download files end with a .dskf file extension.

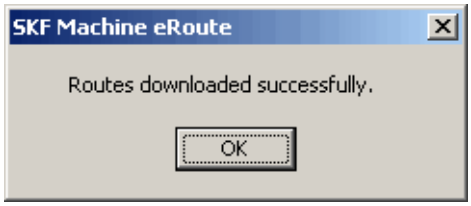
6. Double-click the download file.

   Result: Remote Route closes the Open a download file dialog box and adds the file to the Please select a download file for processing field.

7. Click the Download button.

   Result: Remote Route downloads the file to your data collector. When the download is complete, Remote Route displays an SKF Machine eRoute dialog box.

SKF Machine eRoute dialog box



8. Click the OK button.

   Result: Remote Route closes the SKF Machine eRoute dialog box and returns you to the Microlog ready dialog box.

9. Do one of the following:

   - To download additional files to your data collector, repeat steps 4 through 8.
   - To close the Remote Route application, click the Close button to close the Microlog ready dialog box, and then click the Exit toolbar button.

Uploading data files from your data collector to your laptop

As you perform predictive diagnostics for a client, your data collector records information about the event. This information then needs to be uploaded from your data collector to your laptop. From there you will eventually transfer the file via an FTP application to the Predictive Diagnostics Team, where the file will be processed and analyzed. The following procedure describes the uploading procedure only. For instructions on how to transfer the uploaded files using the FTP application, see "Uploading data files from your laptop to the Predictive Diagnostics Team" on page 13.

To upload a data file, perform the following steps:

1. Verify that your data collector is turned on and properly connected to your laptop.

   Note: For instructions on how to connect, set up, and use a data collector, refer to one of the following Technical Reference Guides:

   - Fan and Pump Vibration, Alignment and Balancing
   - Chiller Vibration and Current Analysis

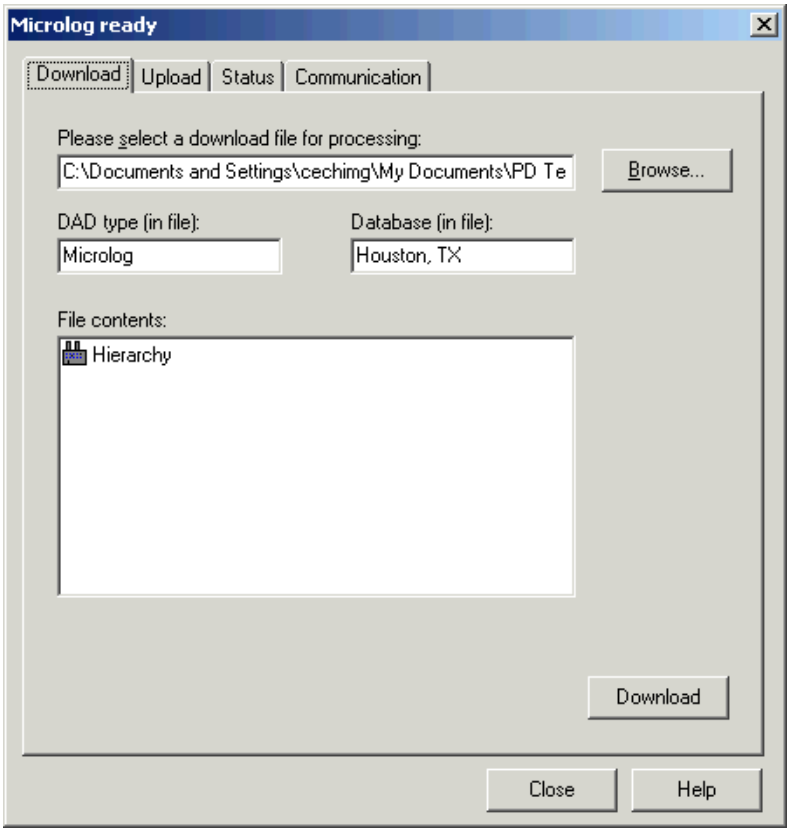
2. Start the Remote Route application.

3. Click the Transfer toolbar button.

   Result: Remote Route opens the Transfer dialog box (Download tab selected) and automatically fills information in the DAD type (in file) and Database (in file) fields.

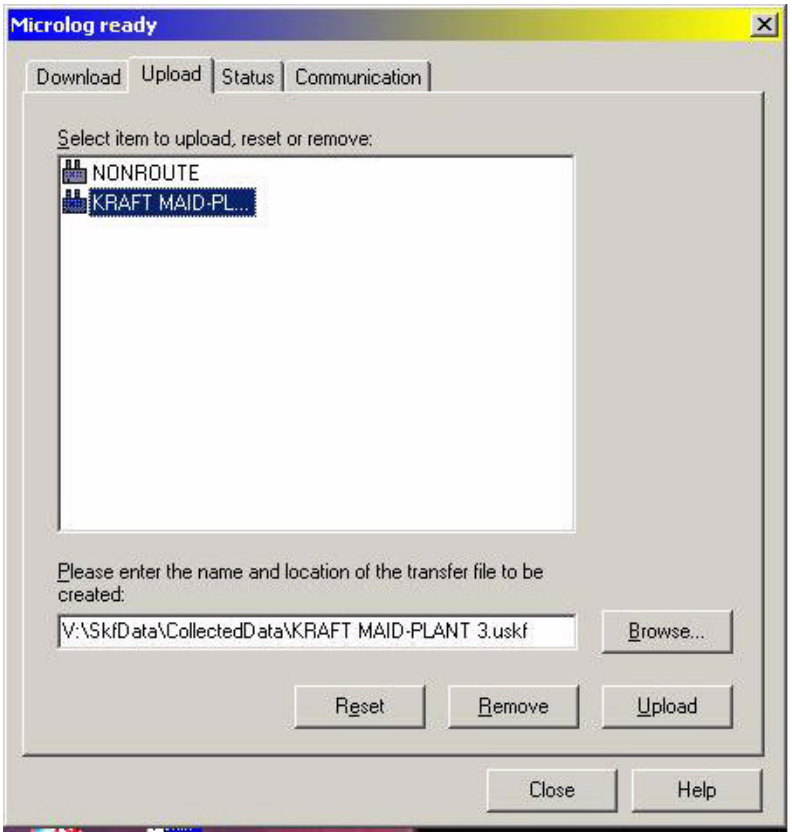
   Note: The title of this dialog box changes to Microlog ready once Remote Route detects the data collector.

Microlog ready dialog box Download tab



4. Click the Upload tab.

Microlog ready dialog box Upload tab



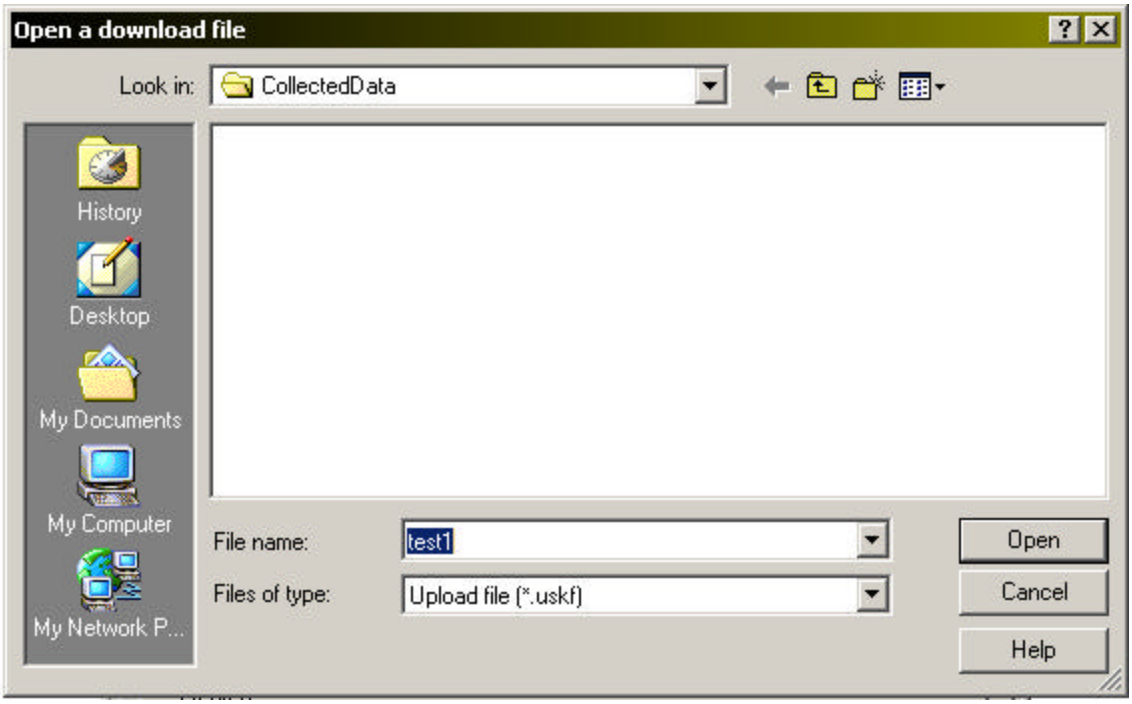
5. In the Select item to upload, reset or remove field, click the route you want to upload.

   Result: The name of the .uskf file for the route appears in the field next to the Browse button.

6. Click the Browse button.

   Result: Remote Route opens the Open a download file dialog box.

Open a download file dialog box



7. Click the down arrow next to the Look in field and navigate to the following location:

   C:/PredictiveDiagnostics/CollectedData

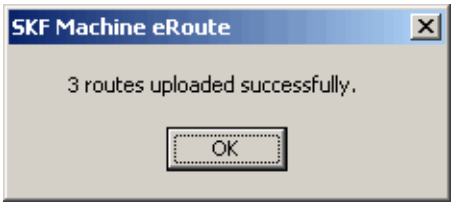
8. Click the Open button.

   Result: Remote Route closes the Open a download file dialog box and adds the directory path to the Please enter the name and location of the transfer file to be created field.

9. Click the Upload button.

   Result: Remote Route uploads the file to your laptop. When the upload is complete, Remote Route displays an SKF Machine eRoute dialog box.

SKF Machine eRoute dialog box



10. Click the OK button.

    Result: Remote Route closes the dialog box and returns you to the Microlog ready dialog box.

11. Do one of the following:

    - To upload additional files to your laptop, repeat steps 5 through 11.
    - To close the Remote Route application, click the Close button to close the Microlog ready dialog box, and then click the Exit toolbar button.

Responding to error messages in SKF Machine Analyst/Remote Route

This section describes an error message you may encounter when you use Remote Route.

Whenever a communication problem occurs between your laptop and your data collector, Remote Route displays a dialog box that states, “Collector not responding.”

SKF Machine eRoute dialog box

This error message may occur for the following reasons:

- the data collector is not connected to your laptop
- the data collector is not turned on
- the cable is not properly installed
- the baud rate for the Remote Route application and the data collector is not the same

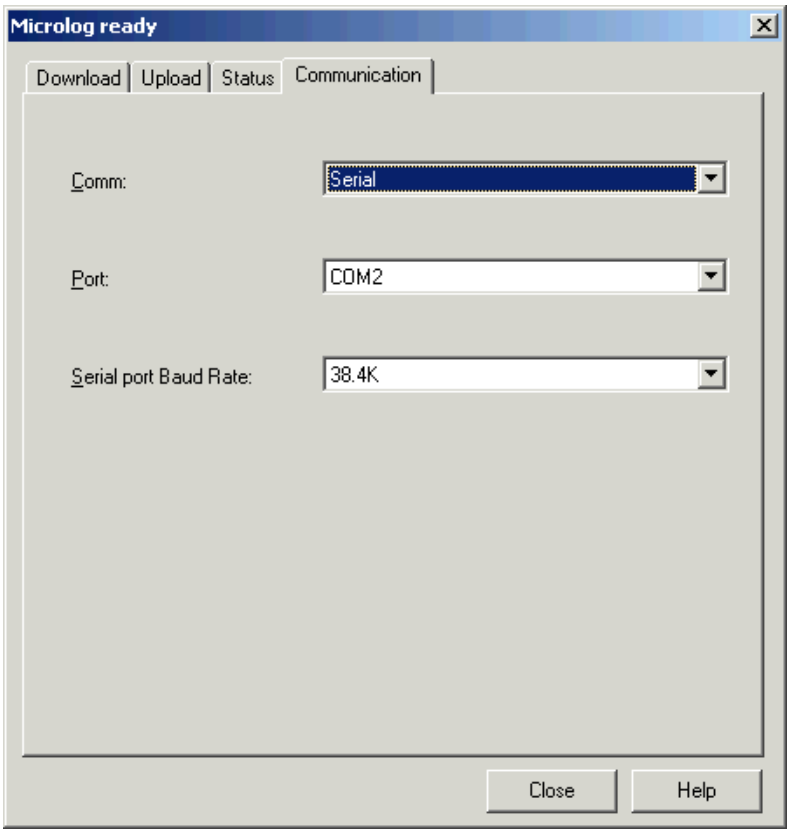
When this dialog box appears, do the following:

1. Click the OK button to close the dialog box.
2. Verify that the data collector is connected to your laptop.
3. Verify that the data collector is turned on.
4. Verify that the cable connecting your laptop and data collector is properly installed.
5. Verify that the baud rate for Remote Route and the data collector is 38.4K. This is the fastest setting available in the

data collector, so to achieve maximum transfer results, it should also be the setting in Remote Route.

- To verify the baud rate for Remote Route, start the application and then click the Communication tab. Verify that the value in the Serial port Baud Rate field is 38.4K. If a different value appears in the field, click the down arrow next to the field, and then click 38.4K in the drop-down list.

Microlog ready dialog box Communication tab



- To verify the baud rate for your data collector, follow the instructions in one of the following Technical Reference Guides:

Fan and Pump Vibration, Alignment and Balancing
Chiller Vibration and Current Analysis

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Bold page numbers (e.g., **15**) = sample screens