Talyrond, Talysurf

Ultra software remote access*

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Introduction

'Remote access' allows a remote user or third party application to run an Ultra program.

Using Ultra software, programs can be written for parts that are being repetitively measured. This saves the user inputting the instructions every time they take a measurement.

Using the new 'remote access' feature in the Ultra software, a remote user or third party application has the ability to run the Ultra program using this option, for example, using a robotic arm to place the part on a fixture and start the measurement program in Ultra (see Figure 1).

The user can log on to Ultra and configure it for remote access through a Remote Access window, simply specifying the remote access folder and input file name. The Remote Access operation can then be started.

An external application creates an input file containing the name of the Ultra program to be invoked. The external application then copies the input file to the remote access folder and Ultra automatically detects the input file and runs the named program.


Figure 1: Robotic arm

On completion of the program, Ultra generates a results file by getting the parameter values from all the analyses, along with a status file.

If an error occurred then a reason code is appended to the status file. The external application detects the status file and can generate a further input file to run another program. Once finished, the user can then stop remote access and close the window.

*Talyrond version 5.23.3.24

Figure 2: Remote access system overview

3rd party equipment
Generates input file. Monitors status and results file.

Creates → Input file → Reads contents →

Ultra
Detects input file, reads it then deletes it, and runs the program named in the input file. On completion a status file and result file are generated.

← Reads contents ← Status file ← Creates

← Reads contents ← Results file ← Creates
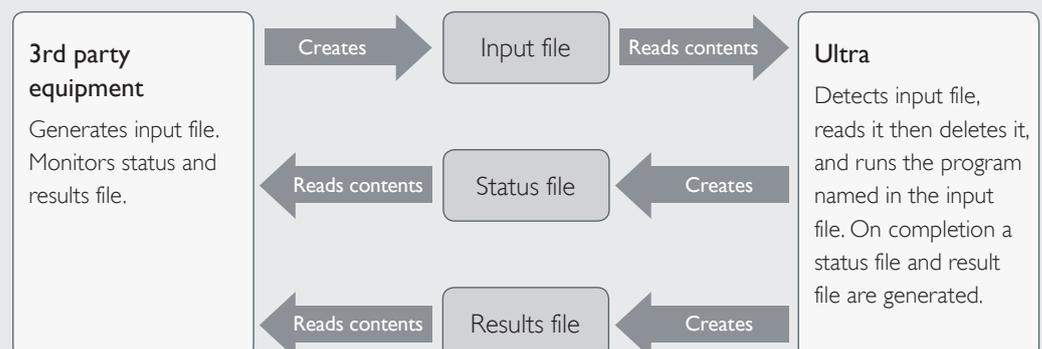
Getting started

Enable the remote access feature before starting Ultra by modifying the configuration file **MServApp.INI** in Ultra's installation folder. This is typically found in: **C:\Taylor Hobson\ULTRA**

Use **Remote Access = 1** to enable.

Use **Remote Access = 2** to disable.

Remote access option in Ultra

When enabled (as above), a **Remote Access** item will be available under the **Talyrond** or **Talysurf** menu option (Figure 3).
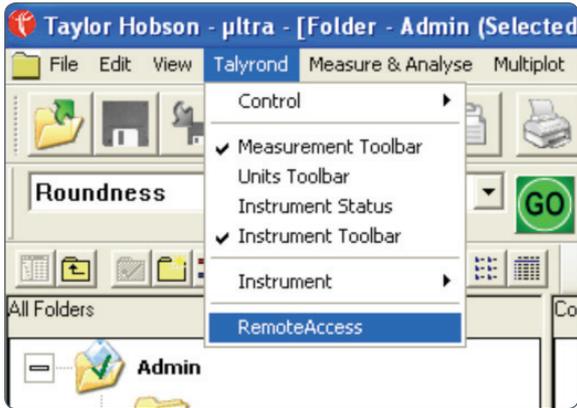

Figure 3: Remote access option in Talyrond menu

When **Remote Access** is selected, four buttons are displayed for facilitating remote operation (Figure 4)

1 – Configure

2 – Start

3 – Stop (disabled by default)

4 – Close
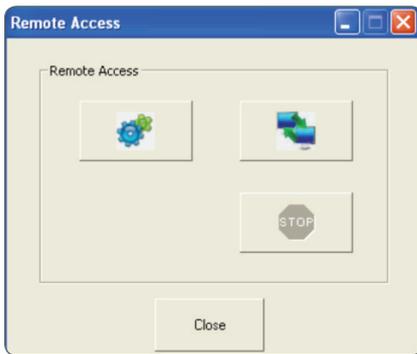
Figure 4: Remote access options

Configure

Click the **Configure** button to display the configure options.
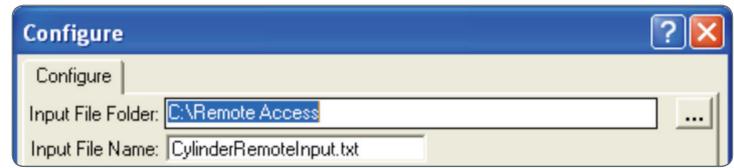
Figure 5: Remote access Configure window

Input File Folder: This is the folder that Ultra looks in for the input file.

Input File Name: The name of the input file. The name must include the extension **.txt**.

Start

Click the **Start** button to begin remote access operation. Once it has started the status bar will show the message **Remote Access Mode**. Ultra will now continuously scan the input folder and detect when an input file is added (Figure 6). Ultra will then run the program.
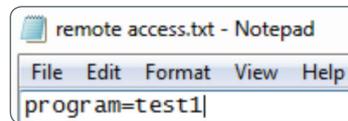

Figure 6: Input file being added

Stop and Close

Click **Stop** to stop the remote operation. The **Configure** and **Close** buttons will become enabled.

Click **Close** to close the Remote Access window.

Output

The output file is a text file (Unicode) containing a single number indicating the program execution status.

The format is: Status = number

Status = 1. Program completed without error.

Status = 2. Program does not exist in the currently selected folder.

Status = 3. Error occurred during program execution
(Type 1 with specific error code).

Status = 4. Error occurred during program execution
(Type 2 without specific error code).

The results file is a text file (Unicode) containing the parameter values from all the analysis results created by the Ultra program.