

User Manual for Aarhus Batch Inversion Distributed

Introduction

The Aarhus Batch Inversion Distributed (ABI) is designed to replace the older EMBI and SCEMBI systems for performing inversions within the Workbench environment. To do this there are two applications, a client application in the front named Aarhus Batch Inversion, and a service application working behind the scenes named AarhusRunner. Users will not be directly involved with AarhusRunner, which is why this document will focus on ABI. All a user needs to know about AarhusRunner is that it is operating on a number of servers in the network, waiting to perform performance-demanding computation tasks ordered by Aarhus Batch Inversion's throughout the system.

ABI is started from Workbench just like Embi and Scembi when running an inversion and is designed to resemble the user interfaces of the old systems.

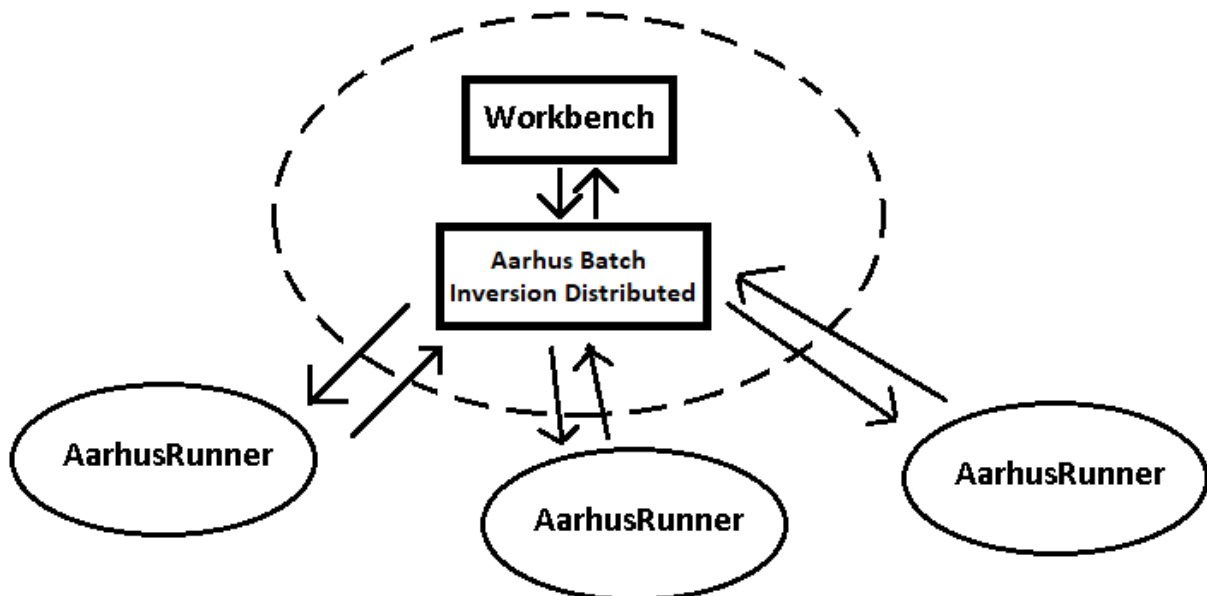


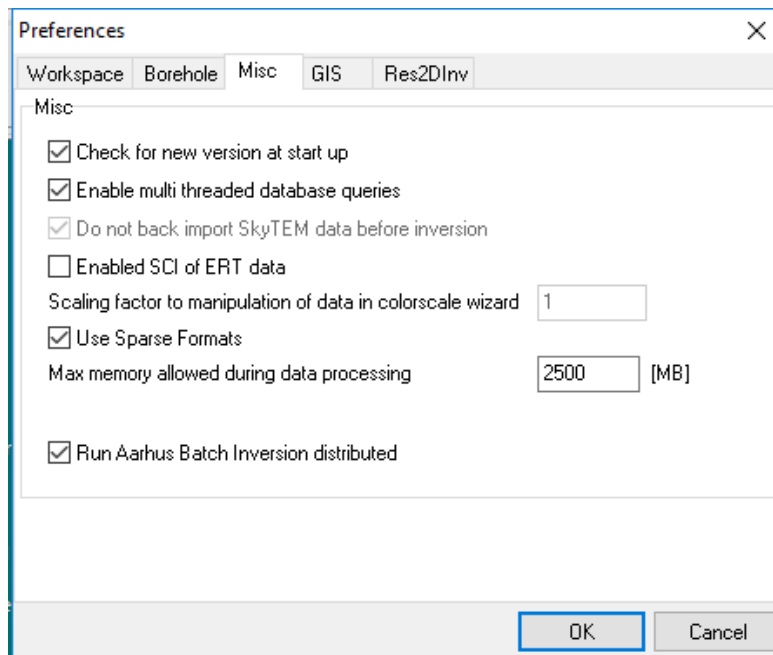
Figure 1: Workbench and Importer interacts with a network of AarhusRunner services

Workbench setup for running ABI

Note: Aarhus GeoSoftware doesn't take any responsibility for the setup and changes in Windows to make ABI work.

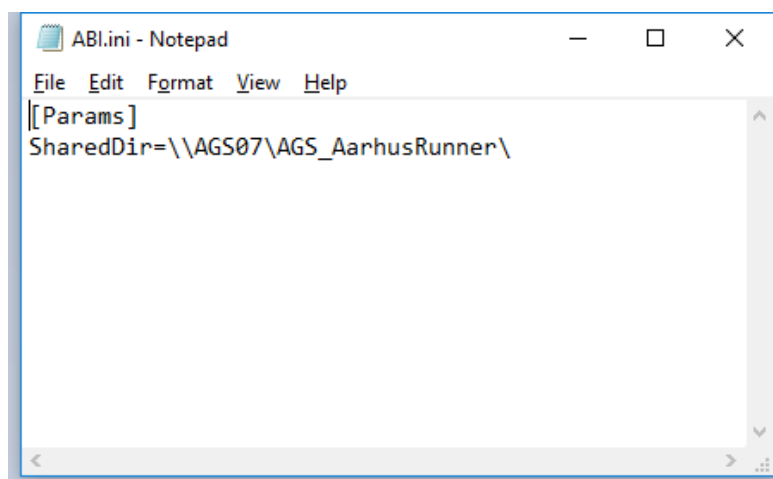
Workbench and Windows need to be set up to start ABI when an inversion is launched. To do so, follow these steps:

1. go to File → Preferences under the Misc tab and check “Run Aarhus Batch Inversion Distributed”.



2. Open the ABI.ini in the workbench installation directory and set SharedDir to point to the shared directory.

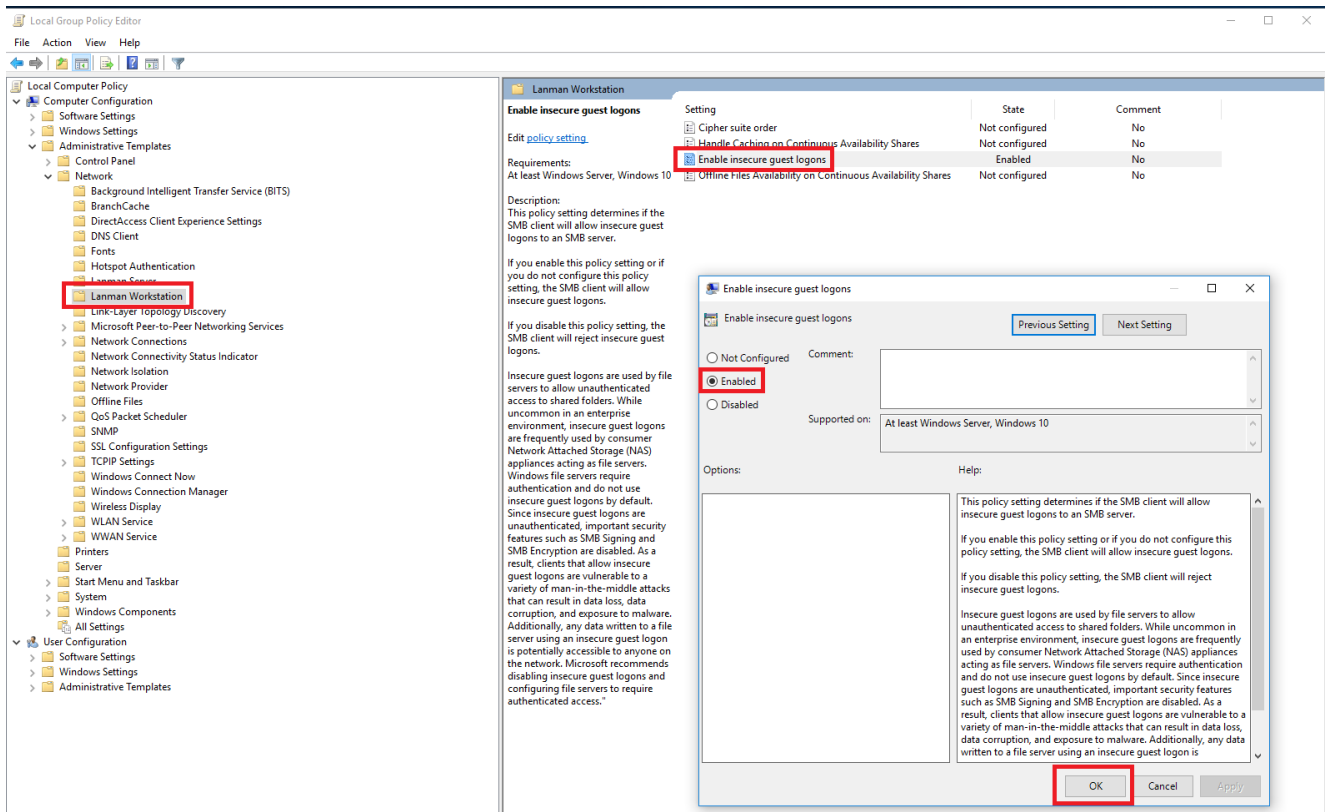
You will need to save the ini file in another folder and copy/replace the existing ini file in the Workbench installation folder, due to Windows admin rights.



Windows 10 only:

Windows 10 have as default restricted the access to network drives for the user. To remove this restriction, open the “Edit Group Policy” in Control panel and go to:

- Computer Configuration → Administrative Templates → Network → Lanman Workstation
- Double click on **Enable insecure guest logon**
- Click **Enable** and **OK**



Now Workbench is ready to use ABI for inversions.

Running an inversion

When the user starts an inversion from Workbench, ABI is launched. The program will prompt the user for a list of hosts to perform the inversion job.

The user can select all or some of the hosts for the inversion job in the server list to the left. On the right there is an overview of active inversion jobs in the network.

After the hosts have been selected, ABI will wait for one of the selected hosts to pick up and perform the inversion job. While the job is running, ABI keeps the user updated via the GUI.

The user **cannot** close the ABI window as long as the inversion job is active. However, the user may choose to cancel the inversion job via the Stop button. This will terminate the inversion process and enable ABI for closing.

The Show Jobs button opens an overview of the active inversion jobs, similar to the overview shown when selecting hosts in the start.

Once the inversion job is done, ABI will import the inversion result to your workspace.

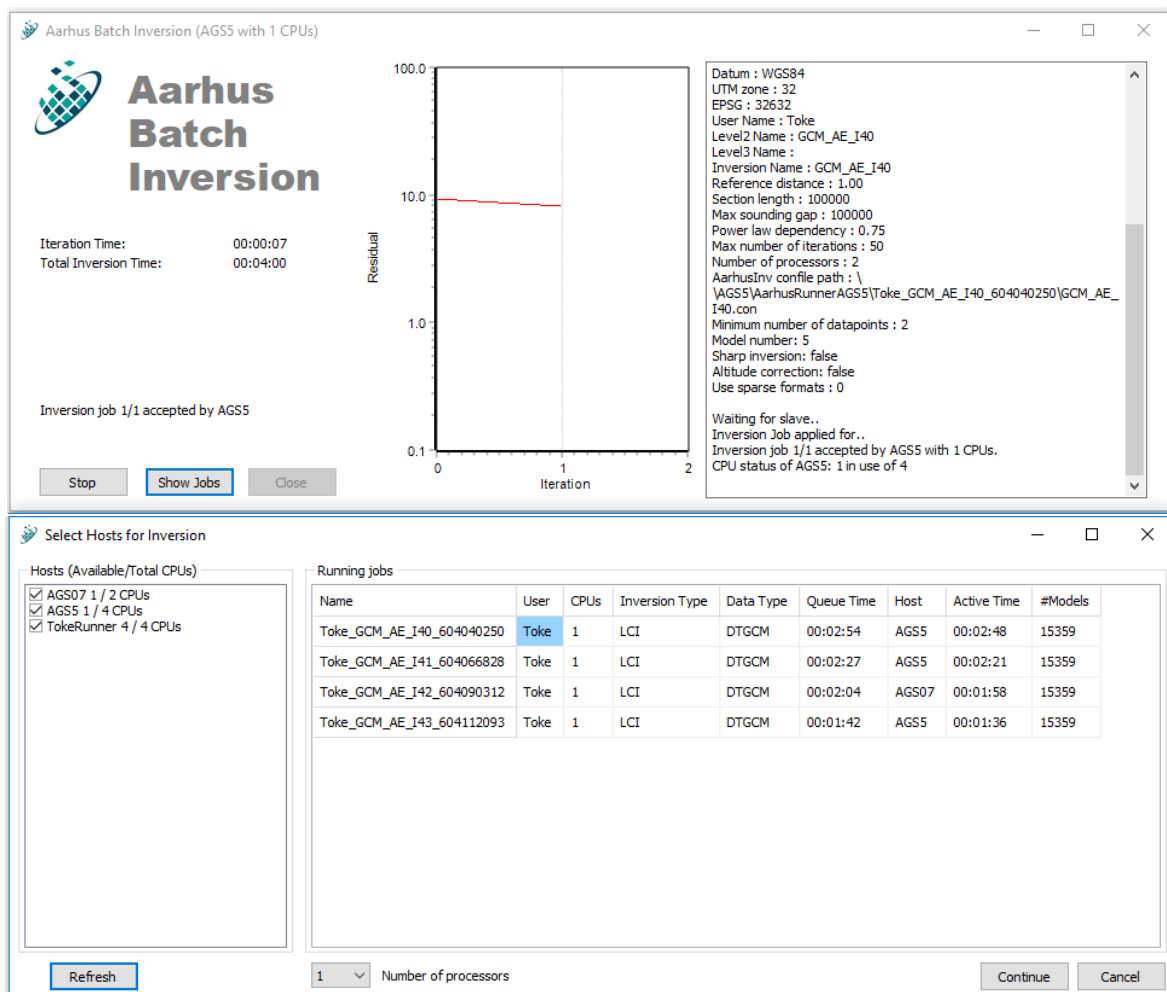


Figure 2: Hosts selection in Aarhus Batch Inversion Distributed