

ESRI Support Center

Bug: Building a network dataset fails with the error "File read/write error occurred" when there is more than 3 GB of available RAM

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Software: **ArcGIS - ArcEditor** 9.1, 9.2, BetaRC 9.3 **ArcGIS - ArcInfo** 9.1, 9.2, BetaRC 9.3 **ArcGIS - ArcView** 9.1, 9.2, BetaRC 9.3

Platforms: N/A

Description

When building a network dataset on a machine that has more than 3 GB of available RAM, the build fails and returns the following error:


"File read/write error occurred".


Cause

The network dataset builder is improperly determining the amount of available memory on the machine, which causes the error to be thrown.

Workaround

Explicitly specify the amount of memory to use when building network datasets. This can be done by modifying the registry.

 This key is not in the registry by default. It needs to be created and set to the appropriate value.

 **WARNING:** The instructions below include making changes to essential parts of your operating system. It is recommended that you backup your operating system and files, including the registry, before proceeding. Consult with a qualified computer systems professional, if necessary.

ESRI cannot guarantee results from incorrect modifications while following these instructions. Therefore, use caution and proceed at your own risk.

1. Open the Registry Editor by navigating to Start > Run, type regedit, and click OK.

2. Expand the HKEY_CURRENT_USER\Software\ESRI\ key folder.
3. Click on the Geodatabase folder. If the Geodatabase folder does not exist, create it by right-clicking on the ESRI folder and selecting New > Key. Rename the new key folder to **Geodatabase**.
4. Click on the NetworkDataset folder. If the NetworkDataset folder does not exist, create it by right-clicking on the ESRI folder and selecting New > Key. Rename the new key folder to **NetworkDataset**.
5. In the NetworkDataset folder, click on the value key MemSizeToUseInBuilding. If the MemSizeToUseInBuilding value key does not exist, create it by right-clicking the NetworkDataset folder and selecting New > DWORD Value. Rename the newly created value key to **MemSizeToUseInBuilding**.
6. Double-click the MemSizeToUseInBuilding value key, change the base to decimal, and set the value data to be 512.



This registry DWORD determines the amount of memory in MB to use when building a network dataset. The suggested value of 512 MB should be adequate, but this number can be increased to be anything under 2000.

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