Configuration for Congo to Communicate Across a Router
Tools Needed:
> USB ASCII Keyboard
> USB Mouse
> 1 x Monitor
> USB Storage Device (if you are backing up your registry)

Purpose:
The multi-console information between Congo's (JR and SR) as well as their accessories (Client PC's, Backup Consoles) use the multicast address 224.0.0.28 to distribute live state information. Multicast address 224.0.0.28 is not forwarded by multicast routers. This means that if Congo consoles are intended to operate in a Server/Backup/Client scenario, they must be on the same subnet. Their live state information will not pass thru the router until the Registry is edited.

Getting to a command prompt

Step 1. **From the heart beat screen Press Control + Alt + Delete from an attached ASCII keyboard.**
This will bring up the Task Manager
Step 2. **Select 'File' from the pull down menu**
Step 3. **Select 'New Task (Run…)'**
Step 4. **At 'Open' type 'regedit', to bring up the Registry Editor.**

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Editing the Registry [****]

'Note: it is always a good idea to backup your registry before making any changes to it. It can be intimidating to a new user, and there is always the possibility of changing or deleting a critical setting causing you to have to reinstall the whole operating system. It's much better to be safe than sorry!

You can save a backup copy of the registry by selecting File, Export, Type in a name, click ok. This registry can be re-imported if the console needs to be rolled back to a previous Registry state.

The Registry has a hierarchal structure; although it looks complicated the structure is similar to the directory structure on your hard disk, with Regedit being similar to Windows Explorer.

You must use a tool commonly known as a "Registry Editor" to make any changes
*The Registry Editor (REGEDIT.EXE) is included with most version of Windows (although you won't find it on the Start Menu) it enables you to view, search and edit the data within the Registry. There are several methods for starting the Registry Editor, the simplest is to click on the **Start** button, then select **Run**, and in the **Open** box type "regedit", and if the Registry Editor is installed it should now open*

Like Windows explorer, to expand a certain branch (see the structure of the registry section), click on the plus sign [+] to the left of any folder, or just double-click on the folder. To display the contents of a key (folder), just click the desired key, and look at the values listed on the right side. You can add a new key or value by selecting New from the Edit menu, or by right-clicking your mouse. And you can rename any value and almost any key with the same method used to rename files; right-click on an object and click rename, or click on it twice (slowly), or just press F2 on the keyboard. Lastly, you can delete a key or value by clicking on it, and pressing Delete on the keyboard, or by right-clicking on it, and choosing Delete.'
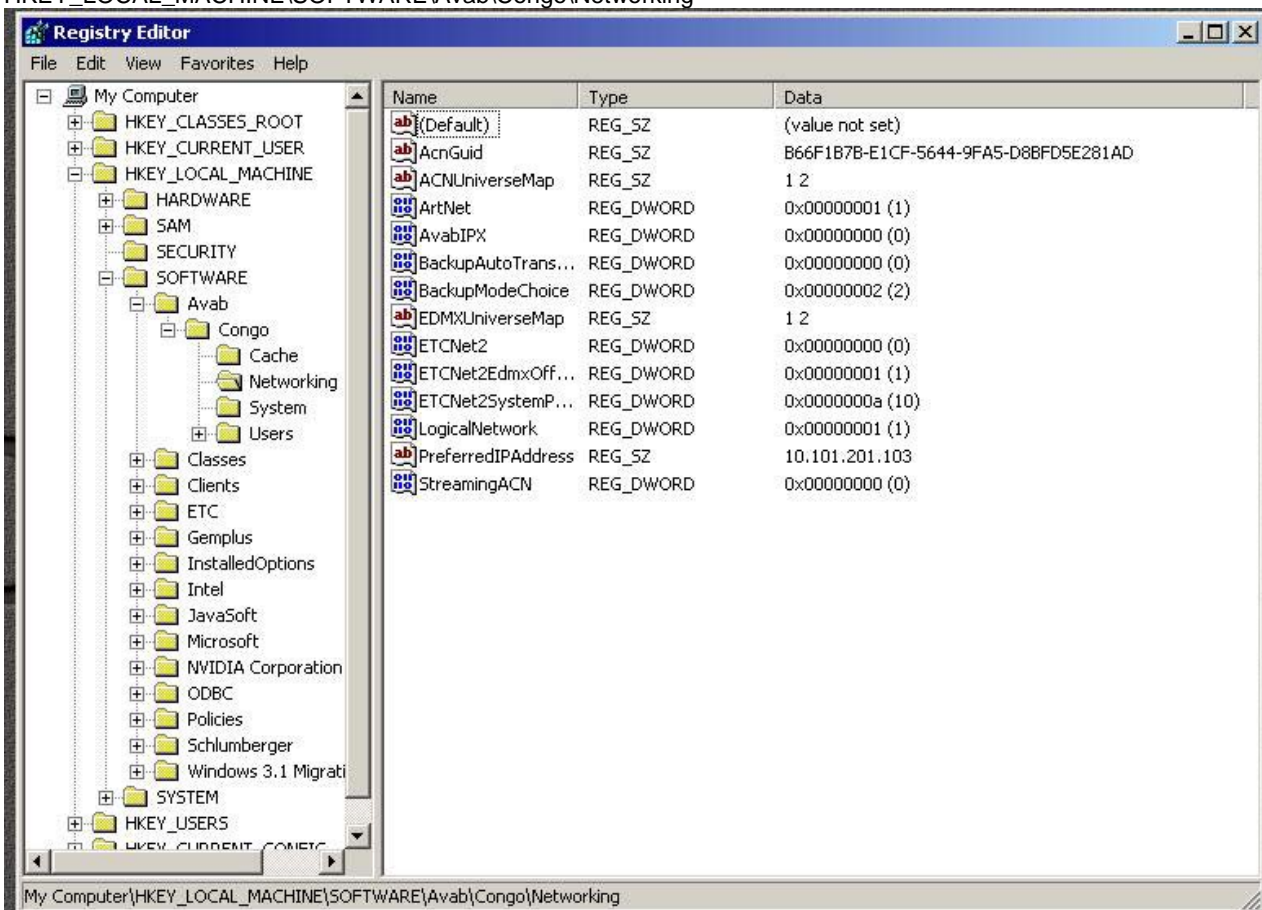
Congo's Default Registry Settings are as follows:
The default multicast address for Congo is 224.0.0.28
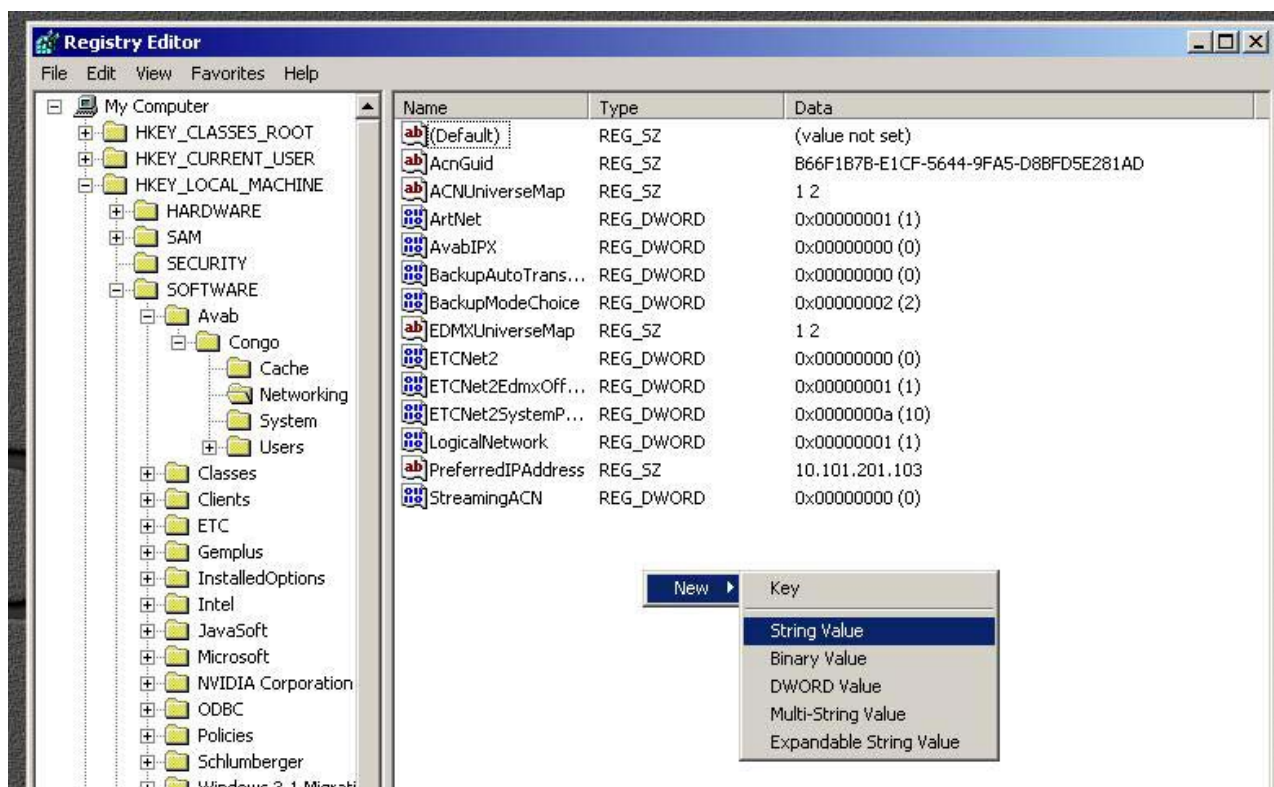The default Time to Live is 1

The Registry will be edited in the following location:
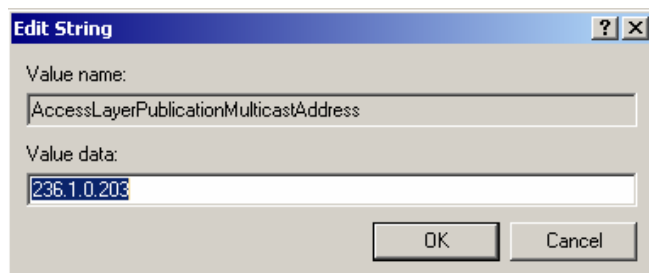HKEY_LOCAL_MACHINE\SOFTWARE\Avab\Congo\Networking

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Step 1. Right click under the existing registry entries and select new "String Value"

Step 2. Label the new string "AccessLayerPublicationMulticastAddress"

Step 3. Right Click on the "AccessLayerPublicationMulticastAddress" string and select "Modify"
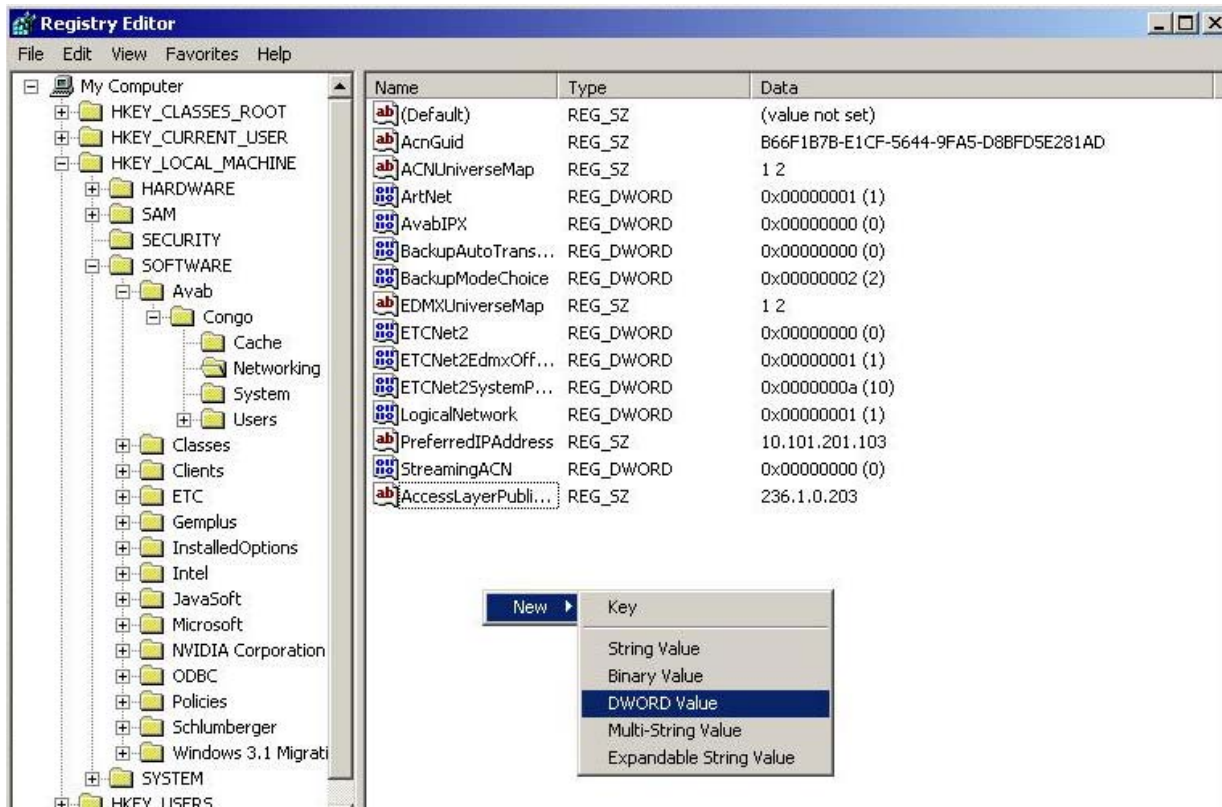

Step 4. Change the Value Data field to: 236.1.0.203
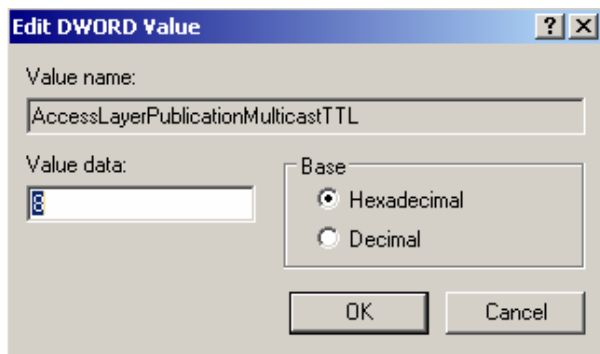**Step 5. Click "OK"**

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Step 6. To change the Time to Live Setting, right click under the existing entries and select "DWORD Value"

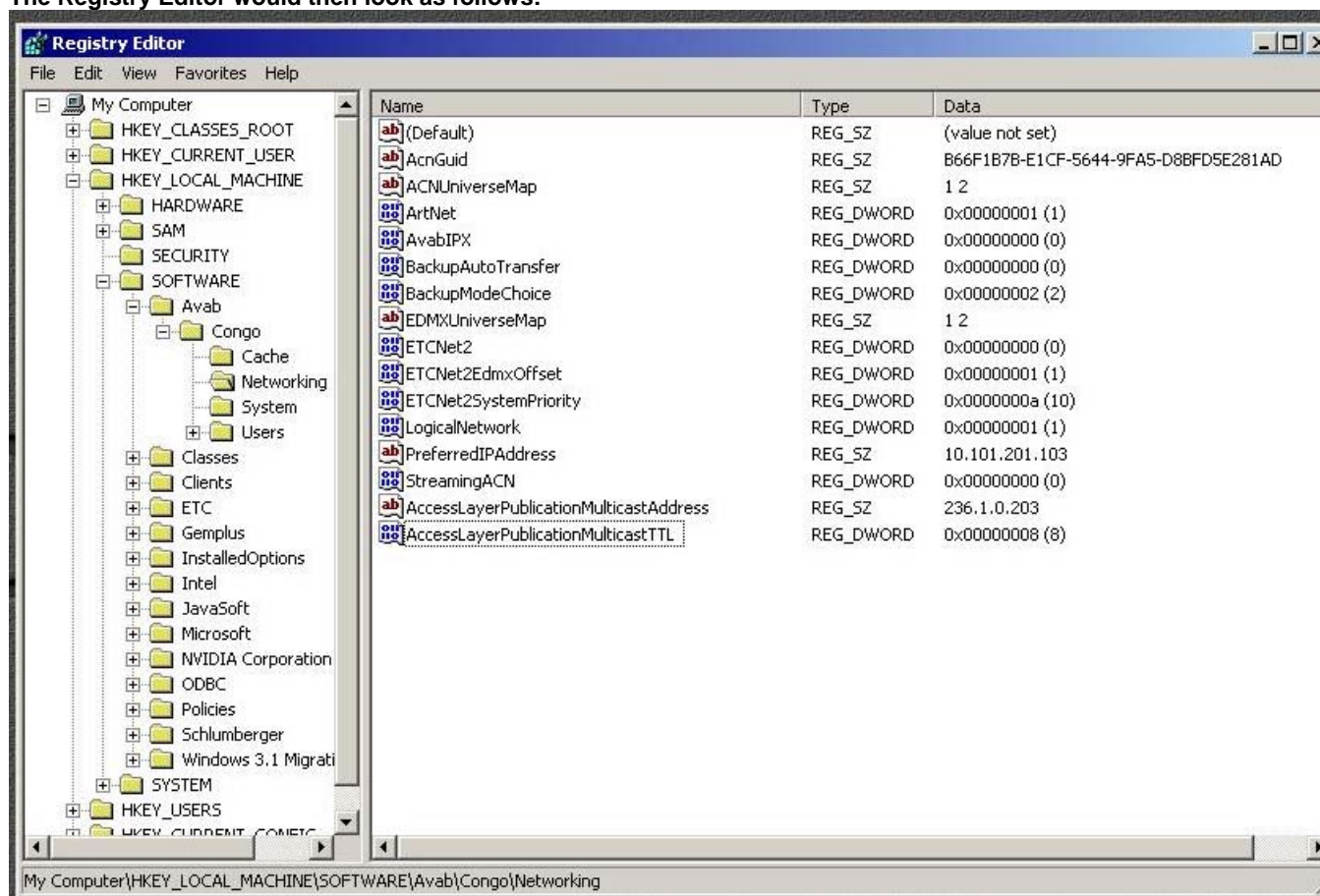**Step 7. Label this Dword value "AccessLayerPublicationMulticastTTL"**

Step 8. Right Click on the "AccessLayerPublicationMulticastTTL" string and select Modify.

Step 9. Change the Value Data to "8"
Step 10. Click "OK"

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The Registry Editor would then look as follows:

Step 11. Exit the Registry Editor
Step 12. Restart your console.

For more information on Multicast information over a routed network click on the link:

http://www.iana.org/assignments/multicast-addresses