*R*TIME Get Archive Data Clones*

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Get Archive Data Clones

- GARCDATA.EXE – (Get Archive Data) Program that retrieves and sends archive data to the R*TIME Data Viewer.

- Why create a GARCDATA Clone?
  - A Non-R*TIME Data archive exists for which you want to import data only for the purpose of trending.
  - The Clone will provide the ability to graph point data.
  - The data will appear to the end user as if it was coming directly from R*TIME.
  - All Data Viewer graphical functions are available to manipulate the trends and graphs.

5 Steps to Creating a GARCDATA Clone

1. Start with the existing GARCDATA workspace and files.
2. Replace the names of the workspace and files to the executable name that you want using global replace calls in Notepad.
3. Create copies of the Archive Request and Response Buffers.
4. Create and call your own function that will fill the Archive Response Buffer.
5. Merge your Archive Response with the normal response.

Step 1. Start with the Existing GARCDATA Workspace and Files

- Select a new name for the executable.
- Copy the GARCDATA workspace and files to a new folder with the selected name in the %RTIMEHOME%\src directory.

Step 2. Replace the Names of the Workspace and File

- Rename the workspace, project file, GARCDATA.c file, and the GARCDATA.rc file to the new name.
- Open each file in sequence and globally replace the GARCDATA name with the new name.
- Open the Workspace in Visual Studio.

Step 3. Create Copies of the Archive Request and Response Buffers

- Create a new instance of Arch_Response_Ptr.
- Create a new instance of Arch_Request.
- Just before the program calls arch_request(), copy the system Arch_Response_Ptr, and Arch_Request to your new instances of these pointers.

Step 4. Create and Call Your Own Function that will Fill the Archive Response Buffer

- Create your function that will use the request as an input and the response as an output.
- Process the request by gathering the point names, the start and end times, and the frequency of the request.
- Gather the data from the data source and stuff the response buffer with the data until either the request is fulfilled, or data is no longer available.
- Return the response buffer.

Step 5. Merge Your Archive Response with the Normal Response

- Merge our Archive Response with the normal archive response.
- The normal arch_request(), takes care of all the little intricacies of the response, so all we have to process in the merge are:
  - The point status.
  - The point value.
  - If the data for the requested time stamps are valid.

Process Complete

- Normal Processing handles shipping the response back to the viewer so we are done and we should now have valid graphical data.