Environment Manager v2.16 – Guide

Environment Manager v2.16 has been enhanced to provide this functionality:

- Support for multiple versions within a release – This allows you to change Service Packs
- Support for a normal and a debug build
- Support for ClearSCADA files (v7.30 onwards)
- Support for Web Client – Server files
- Introduces a "global" store so users can share captures
- Introduces a custom store for updates AFTER the copy – e.g. restore a particular driver version
- Update the "IO to Disk" to be "IO to Persist" – memory mode with persistence on
- "ecf" archives can be restored to the local or global location
- Command line support of specific version to make active, e.g. -makeactive=7.50.000.4107

Environment Manager use is for in house testing and it is not recommend to be used on a live production system.

Tool Use Caveats:

The tool assumes that the actions taken by the installer for the first product revision install, will be valid for all others. E.g. 7.40 RTM install logic is valid for 7.40 SP1 install etc.

This tool is now released as a CitectSCADA Toolbox tool and is not part of any official release by Schneider Electric.

Not all options of Environment Manager have been retested. There may be parts of the tool no longer compatible with the latest version of CitectSCADA.

Pre v2.16 Environment Manager captures cannot be used in v2.16 when "multi version" support is enabled.

Users should always backup their SCADA projects before using the tool.

Users need to be aware that Service Pack specific changes can affect the compile of a project, e.g. a project using a feature in a later Service Pack then restored to an earlier Service Pack. i.e. a v7.20 Sp5 Example project will not compile successfully in a v7.20 version, you need the Example project for v7.20.

Setup

After running the installer select the following options where appropriate:

Options
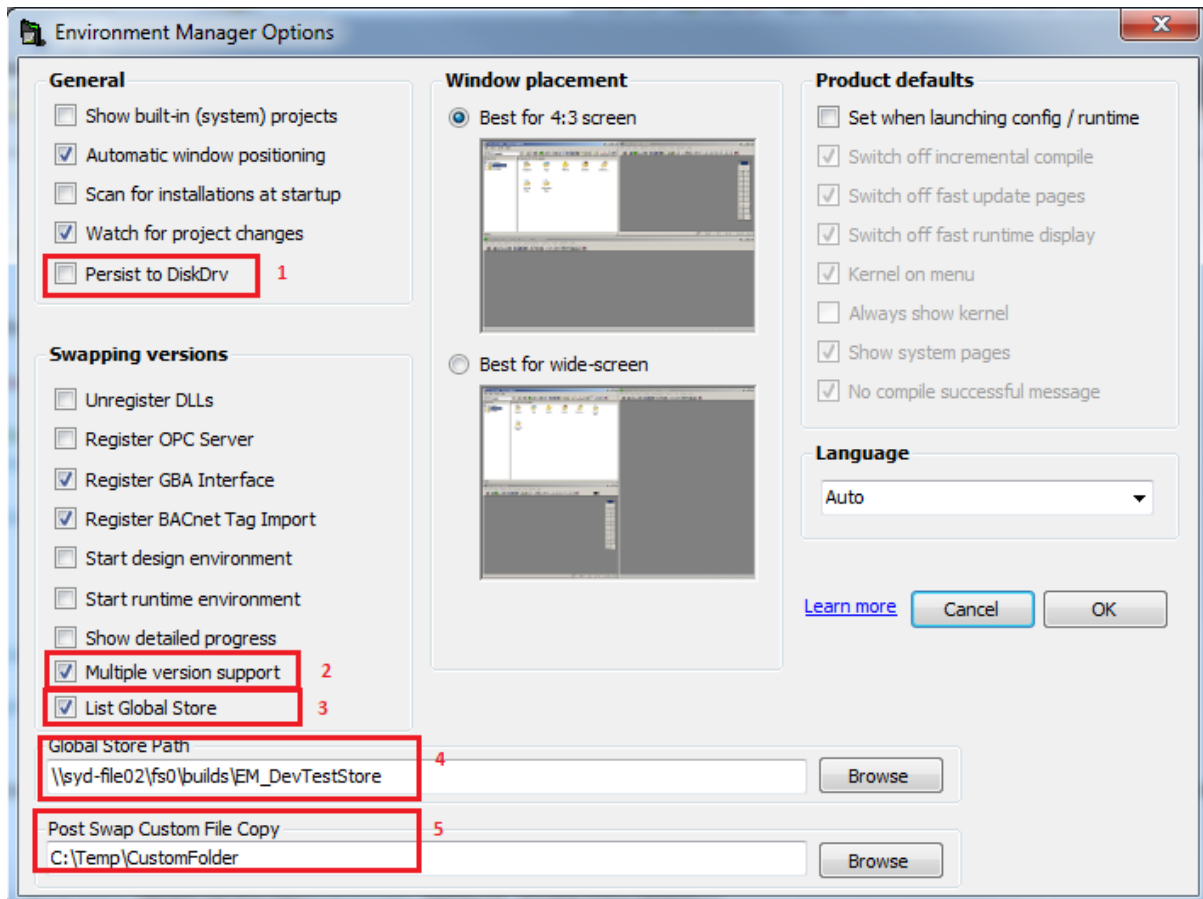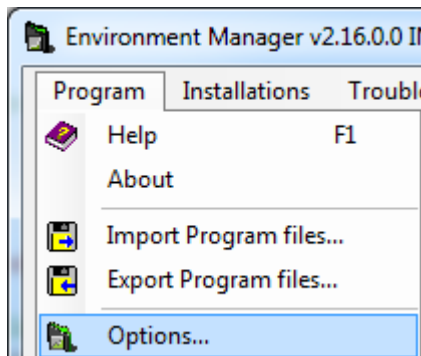
1. Only tick this is you want the old logic of converting IODevices to disk devices
2. You need to tick this for multi version support, i.e. for Service Packs within a Major version
3. You need to tick this for use of the global store
4. Set this to a network area where installed versions of CitectSCADA can be stored. Without this being ticked, the local store on your PC will be used.
5. Set this if you want to use a local area to copy files to the "make active" installation after the copy (content discussed later)

After setting options close Environment Manager and Restart.

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Operational Details

Main Screen
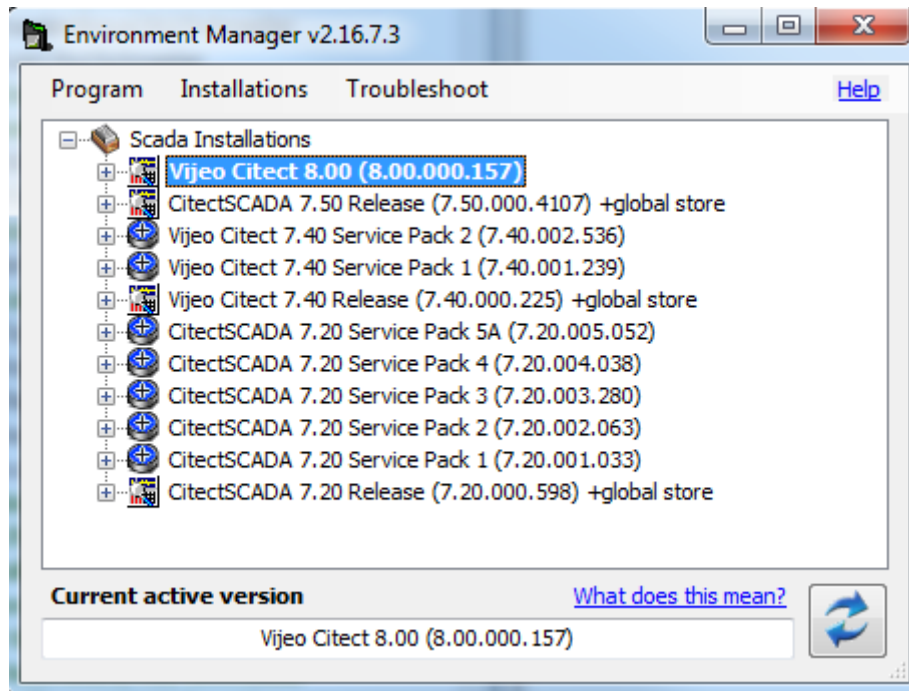
The tool MUST have an installed version of the product for alternative storage locations to be shown, e.g. even if the global store has 10 x v7.40 versions, none of these will be shown unless you have a v7.40 installation.

ICONs

       Current installed product version

       Local store, no bin files (pre 2.16)

       Local store with bin files

       Global store, no bin files (pre 2.16)

       Global store with bin files

Note: The "local" store is private to you.

+Label

If a +label exists, this indicates that an installed version has a store associated with it.

+local y – local storage of product

+global y – global storage of product

+x store means all files are stored, common files and citect\bin files

+x partialstore means only the "common files" are stored. i.e. this store is from an older environment manager and cannot be used to swap versions within a release

Capture
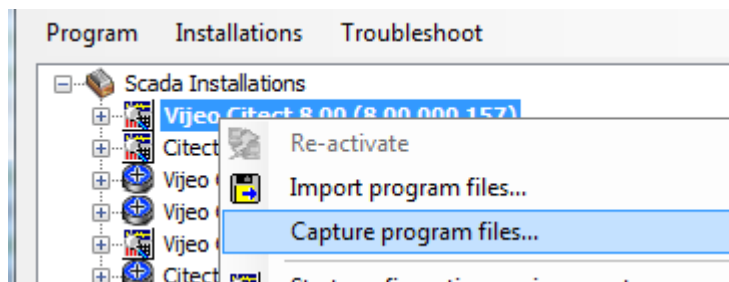
During the capture process, a copy of the citect.ini used will be left in the same location with the suffix "_<version>" added.

Click on the "refresh" ICON (lower right corner) to refresh the status.

*Do you need to create a CTZ project backup at this time ?*

Storage Format

The local and global storage locations use the same format. A release directory which has the version encoded in the name. All the top level files get copied to the "Common Files\Citect" location EXCLUDING EM_BIN. EM_BIN is reserved for the files for the SCADA Install \bin area.
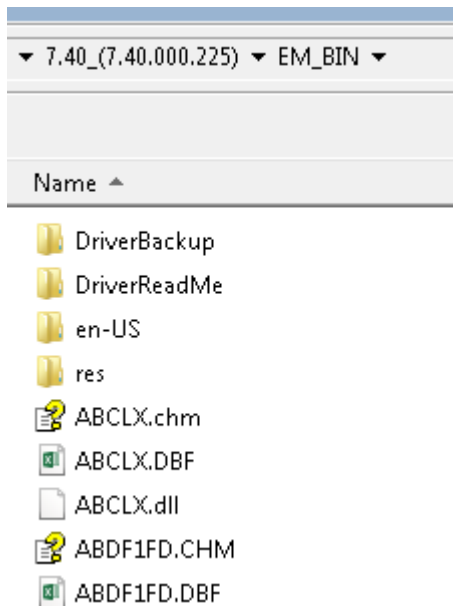
The local StoredProgramFiles folder is created in the directory where the EnvironmentManager.exe is located.

Inside a product store
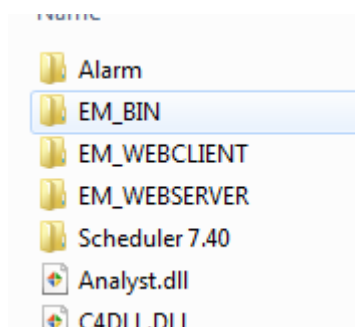
Inside a EM_BIN

Manual Adjustments – A store can be adjusted after the fact if the following rules are obeyed:

1. Common Files – Are copied directly into the store area
2. Citect\bin files – Stored under EM_BIN
3. C:\inetpub\wwwroot\Citect\client\<version> - Stored under EM_WEBSERVER
4. C:\Windows\SysWOW64\citect\webclient\<version> - Stored under EM_WEBCLIENT
5. V7.20 GAC files – Under EM_GAC_MSIL

Recommendations

- Delete unnecessary folders in the source or storage folder to reduce the file count. E.g. do you really need the bin\driverreadme and bin\driverbackup folders ?
- When placing "captures" into the global stores, be rigorous that you have the original install files (and have not replaced files).
- When using a new EM release, delete C:\ProgramData\Schneider Electric\Environment Manager 2.16\ScadaProducts.xml
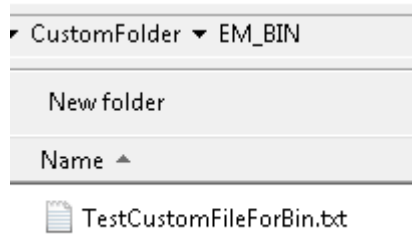
Custom Files

The post copy custom folder has the same format as the storage folders to allow for any future needs. It is likely that the user may want to restore particular driver version dll's. These would be placed in the EM_BIN folder.

If you don't need this, ensure the Option for this is left blank
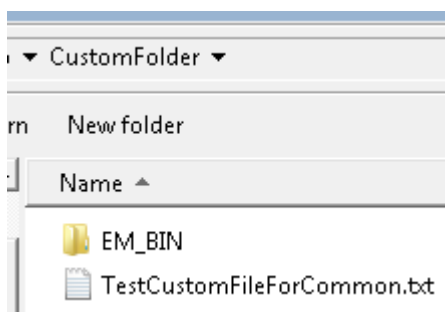
Command Line Options

By default EM, offers

-[help|?]
   Displays command line usage help.

-activeversion
   Displays the currently active version.

-makeactive=<M.mm[.ppp.bbb]|iniPath>
   Swaps to the specified version.

-startconfig=<M.mm|iniPath>
   Starts the configuration environment.

-startruntime=<M.mm|iniPath> -project=<projectName>
   Runs the specified project.

Where:
   'M' is the major version.
   'm' is the minor version.
   'ppp' is the patch version.
   'bbb' is the build version.
   'iniPath' is the path to an INI file enclosed in quotes.
   'projectname' is the project name.

When using the commandline, use the **EM.BAT** macro to ensure that the command waits until the change is made.
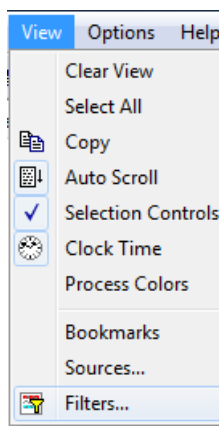
e.g. em -makeactive=7.50.000.4107

Issues

Refresh
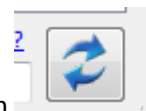
If after an operation the screen does not seem to have refreshed correctly, click on to do this.

Debug

If you run up "DbgView" (https://technet.microsoft.com/en-us/library/bb896647.aspx) or "DebugView++" (https://debugviewpp.wordpress.com/) you will be able to see and capture the debug from the program to confirm operation.

A standard devtest machine has these in c:\winutils

You can use these to make recommendations on what does not need to be registered.

Missing or wrong Products

Delete C:\ProgramData\Schneider Electric\Environment Manager 2.16\ScadaProducts.xml and restart the program.

Check that the correct versions ARE in the stored area. Do sample checks of the common files, and bin area DLL versions.