

Better Archivation and Versioning

The new Release 2. 21 of the embedded software development system UNIVERSAL PROGRAMMING STUDIO now offers new and powerful capabilities for archiving and versioning networked multiprocessor systems. Of course, this also includes user-friendly access control to the module files of the system.

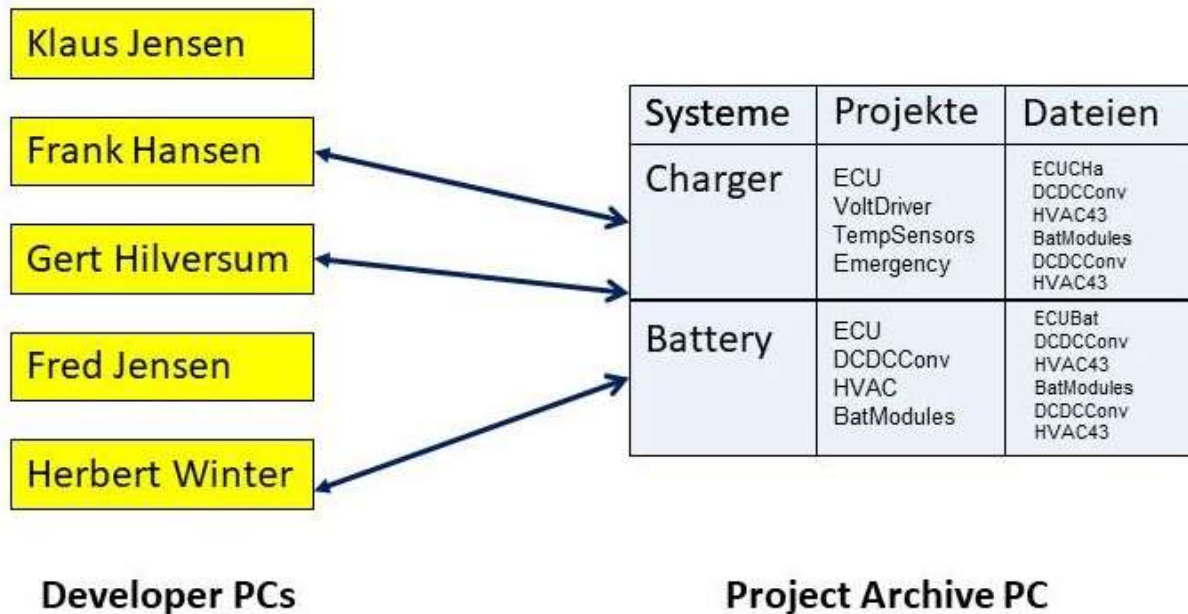


Figure 1 - The central multiprocessor archive

At UNIVERSAL PROGRAMMING STUDIO, the entire software is stored in a central archive, see Figure 1. This eliminates the annoying and error-prone check-out and check-in of files, because the files are processed directly in the archive by the developers. This leads to a secure and considerably simplified development.

Developers	Access Data	
<ul style="list-style-type: none"> Dudolf Systems <ul style="list-style-type: none"> Development <ul style="list-style-type: none"> Klaus Jensen Gert Hilversum AppDev <ul style="list-style-type: none"> Frank Hansen Renergy <ul style="list-style-type: none"> Development <ul style="list-style-type: none"> Herbert Winter 	Developer Items	Developer Data
	Company Name	Dudolf Systems
	Department	AppDev
	Developer	Frank Hansen
	Email	FHansen@dudolf.de
	Phone	0171 285648
	Status	Active
	Start time	24.10.2023 17:40:31
	Exit time	24.10.2023 17:40:31
	Password	
	Access control	1

Figure 2 - Determination of the access rights by "Access Control"

In the "Access Control" window, the development manager determines which developer gets which editing rights for module files, see Figure 2.

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	Presence List					
	Company Name	Dudolf Systems	Dudolf Systems	Dudolf Systems	Dudolf Systems	Renergy
	Department	Development	AppDev	Development	Development	Development
	Developer	Klaus Jensen	Frank Hansen	Gert Hilversum	Fred Jensen	Herbert Winter
	Email	KJensen@dudolf.de	FHansen@dudolf.de	GHilver@dudolf.de	FJensen@dudolf.de	ihwinter@renergy.de
	Exit time	22.01.2024 16:55:58	24.10.2023 17:40:31	24.10.2023 17:40:31	31.09.2023 14:57:45	24.10.2023 18:27:39
▶	Phone	040325688	0171 285648	0403256689	0403256690	089678543
	Project		C:\UPStudio\Proje...	C:\UPStudio\Project...		C:\UPStudio\Project...
	Start time	22.01.2024 16:55:58	24.10.2023 17:40:31	24.10.2023 17:40:31	31.09.2023 14:57:45	24.10.2023 18:27:39
	Status	Inactive	Active	Active	Inactive	Active
*						

Figure 3 - Status view by the Presence List

In the “Presence List” window he can see which modules are currently being edited by which developer, see Figure 3.

For the developer, UNIVERSAL PROGRAMMING STUDIO offers a particularly simple handling - as simple as the former Source-Safe from Microsoft. If the developer opens a module file in the selected project, UNIVERSAL PROGRAMMING STUDIO checks to see if the file has already been opened by another developer. If yes, he/she will be informed in a window that the file is locked for him/her and which developer is editing it – with all contact details such as company, department, phone and email. Otherwise, the selected file will be opened immediately. Once the developer closes the file again, it is accessible to all other developers.

Because the entire software with all graphical programs and settings remains in the central archive, archiving and versioning is also a simple matter. For example, the weekly archiving can be done automatically after approval by the integrator by simply copying all projects to a mass storage. With each successful integration run, the new corresponding version numbers are automatically modified.

The creation of new projects on the basis of existing projects by clicking on a context menu is also a small thing. And the creation of clone projects, such as 20 identical 48V battery modules, is no longer a problem with the prototype project. Project-specific properties such as the CAN addresses of the projects are automatically entered when the 20 new projects are created.