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Welcome to UniDownload Designer Help Version: 14/6/10

This tool downloads compressed control applications to local or remote Unitronics controllers. You generate a compressed application from within either U90 Ladder or VisiLogic. Your end user will be able to download the application, but will not be able to view or modify it. The tool can download applications and OS.

The UniDownloader package enables you to build a complete, compressed project and send it anywhere to be installed in a PLC using a standalone downloader. Vision, M90/91, and Jazz controllers are supported.

The package comprises two software programs:

- **UniDownload Designer**

Use this to create a compressed download file that can include a complete control project and an OS. Depending on the type of controller you select, other options may be available, such as font files. The UniDownload Designer is included on the Tools menu of VisiLogic 7.0.0 and U90 Ladder 6.0.0 and up.

- **UniDownloader**

This tool downloads the compressed control applications to local or remote Unitronics controllers. UniDownloader is available as a separate download from www.unitronics.com, and is also included in the Remote Access software package.

How to

[Build a .dvi, .vdf, or .u90 file](#)

[Design a .udc file](#)

UniDownloader Concepts

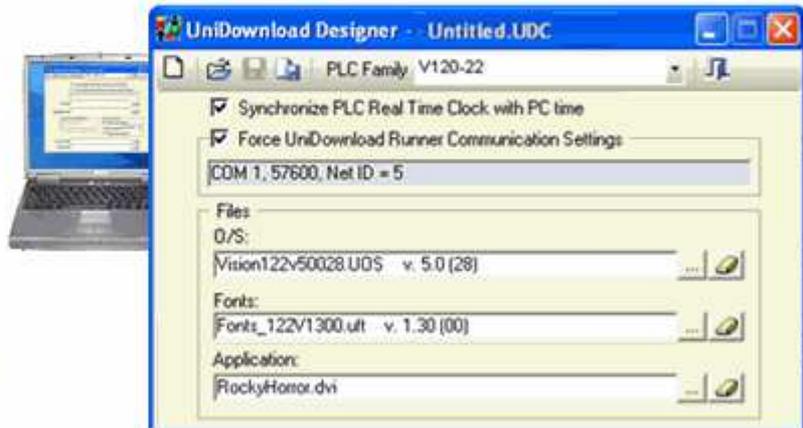
Build a U90 Ladder or VisiLogic control project, and then .dvi, .vdf, or .d90 file.



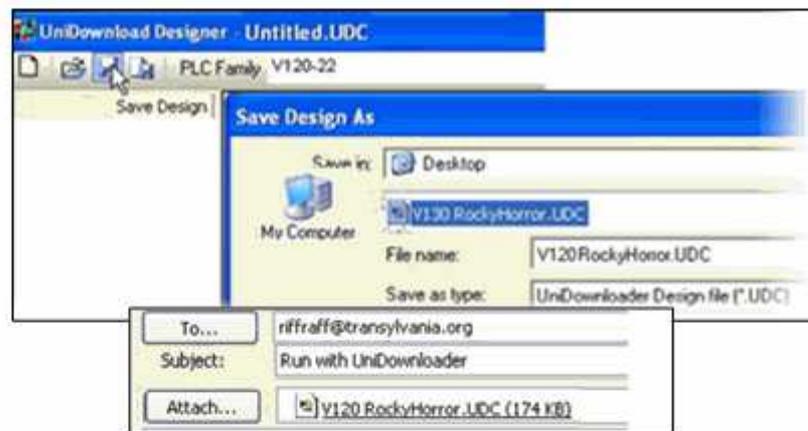
Start the Download Designer from the Tools menu.

Build the Download (.udc) file.

The options you can select vary according to the PLC Family.



Save the .udc file, and send it anywhere.



Open the .udc file with UniDownloader, and download the project to the PLC.



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Building .dvi, .vdf, and .u90 Files

These files contain complete applications in compressed format, including both the Ladder and HMI applications. These files cannot be opened, but can be downloaded to a controller using UniDownloader.

There are three types of files:

- **.dvi**
Create these in VisiLogic; .dvi supports [Standard Vision](#) controllers.

- **.vdf**

Create these in VisiLogic; .vdf supports [Enhanced Vision](#) controllers.

- **.d90**

Create these in U90 Ladder; .d90 supports Jazz, M90, and M91 controllers.

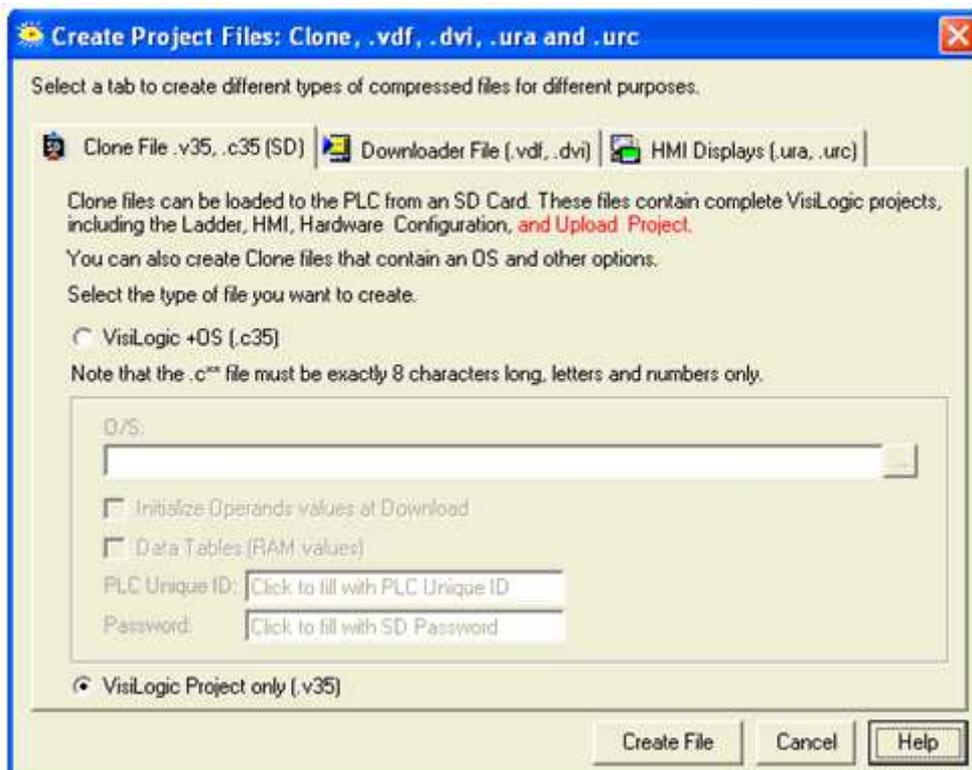
Both the controller you use to make the download file (source), and the controller that is installed with the file (target) should be installed with the same OS Version.

- Notes** ♦
- ♦ To avoid errors in the file, the creation process must run smoothly, without being aborted or affected by PC faults.

Creating .dvi and vdf files in VisiLogic

To create Project files:

1. Click on the Project menu and select Create Project files.
2. Select the appropriate tab and follow the on-screen directions.



.c35 Files

- Notes** ♦
- **PLC Unique ID**
Each PLC has a unique ID number, which is shown in SDW9. Use this number to restrict a program to a particular PLC.
 - **Password:**
This is assigned to the SD Card via the [Set SD Card Password function](#).

Both the controller you use to make the download file (source), and the controller that is installed with the file (target) should be installed with the same OS Version.

- ◆ To avoid errors in the file, the creation process must run smoothly, without being aborted or affected by PC faults.

Checking the integrity of the .dvi file

Although you do not need to have Remote Access installed on your PC in order to create .dvi files, you need to install it in order to check .dvi files.

1. After you have created the .dvi file, save the project from which it was downloaded.
2. Open a new, empty project and download it to the controller.
3. Start Remote Access and select the appropriate Vision model.
4. Click on the Project Downloader which is located on the Remote Access Tools menu.
5. Navigate to the .dvi file and download it into the controller.
6. Reopen the original Ladder project used to create the .dvi file.
7. Select Verify from the Controller menu; the Verify process will compare the project in your PC with the .dvi application installed in the controller.

If the Verify process is successful, the .dvi file is valid.

Creating d90Download files

1. Click Download, then click the Select All button.
2. Click the Advanced button and **Check Create Download file**.
3. A dialog box opens, enabling you to select a Save location. Select a location, then click OK to create the file.

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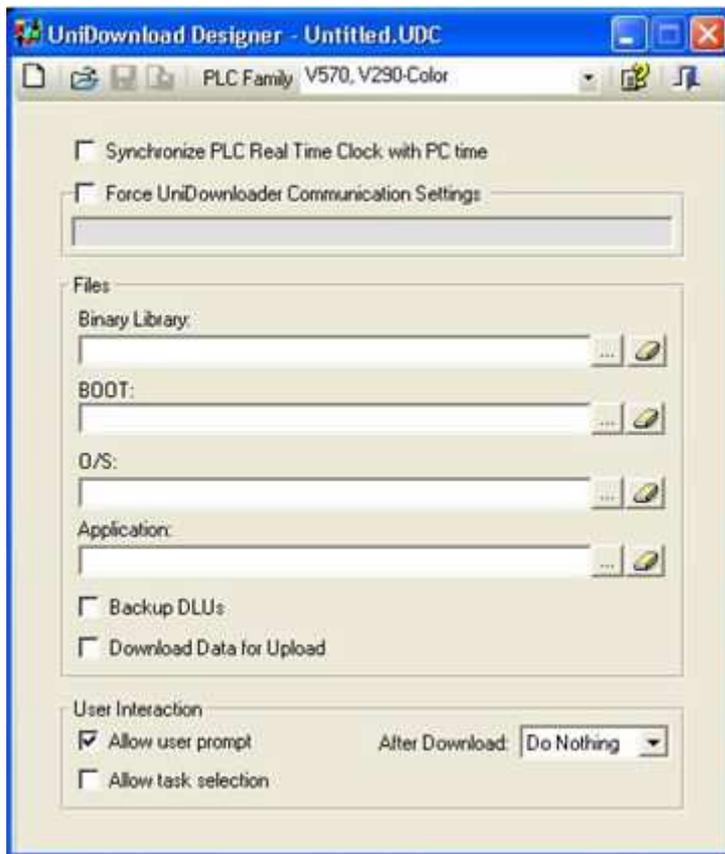
Designing a .udc file

The .udc file is the download file type for all controller models.

1. Start the UniDownload Designer from the Tools menu of VisiLogic or U90 Ladder.
2. Select a PLC family; the UniDesigner available options change accordingly.



3. Select the options for the .udc file. The options you select here control the actions available to the end-user who downloads the .udc file.



Parameter Name	Description	PLC Family
Synchronize PLC Real Time Clock with PC time	Select this to force the RTC value in the end-user's PC to the download target PLCS	All
Force UniDownloader Communication Settings	Select this to open PC Communication Settings . Any selections you make, such as baud rate, will become part of the .udc file. You can even select to restrict download to a particular Network ID address.	All
O/S File	Click on the field to navigate to and attach an OS file. <ul style="list-style-type: none"> • Vision: .uos file extension: Note that OS files named Vision230vxxxx.UOS serve models V230/260/280/290/530. All other OS files contain the name of the relevant controller; for example the OS for the V130 may be named VCO00200208_V130.UOS. • M90/91/Jazz: .osi file extension, as follows M90: M90xxxxx.osi M91: M91xxxxx.osi Jazz: NXxxxxxx.osi 	All
Application File	Click to attach a compressed application (.dvi, .vdf, .u90) containing the PLC and HMI application	All
Fonts File	Click to attach a Fonts file. Note that the Fonts file	Standard Vision Division only
Application Download Options	Note that: <ul style="list-style-type: none"> • .d90 and .dvi files contain the backup and upload data that was set in the original application • .vdf files do not contain this data. Backup and upload data is determined by the options you select in the UniDownloader 	
Back up DLUs	Select this to back up the application to FLASH memory at download. This enables the PLC to recover the application in the event of total power loss, including battery failure.	Enhanced Vision Division only

Download Data for Upload Select this to enable the application to be uploaded from the PLC.

User Interaction

Enhanced Vision
Division only

Allow User Prompt Select this to prompt the user to perform an action after download.

After Download Selecting Allow User Prompt activated this option. Click the drop-down arrow to select an action, such as resetting the PLC.

Allow Task Select this to enable the user to download only specific parts of Selection the .udc file, such as OS file

Shortcuts

If you know the location of UniDownloader.exe in your end-users PLC you can create a shortcut that can automatically download the .udc file and close UniDownloader. To do this, edit the shortcut Target as follows:

To open the .udc in UniDownloader:

```
"C:\Program Files\Unitronics\Unitronics UniDownLoader\UniDownloader.exe" Kiln Application Update.UDC
```

To automatically download the .udc:

```
"C:\Program Files\Unitronics\Unitronics UniDownLoader\UniDownloader.exe" Kiln Application Update.UDC *run
```

To automatically download the .udc and close UniDownloader:

```
"C:\Program Files\Unitronics\Unitronics UniDownLoader\UniDownloader.exe" Kiln Application Update.UDC *run*end
```

- Notes** ♦ The .udc should force UniDownloader Communication Settings.
♦ The quotes and spaces shown above must match the examples shown above

