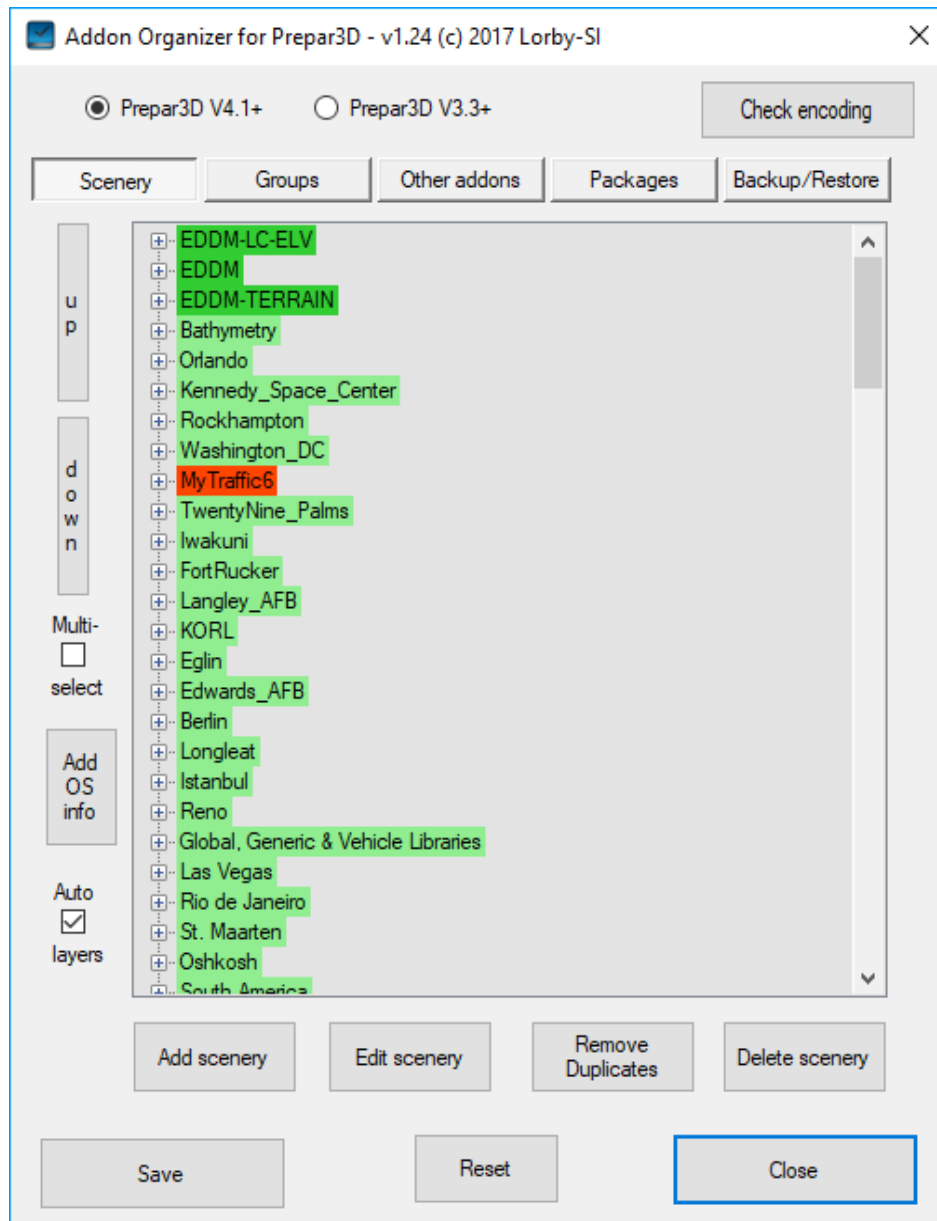


# Prepar3D V3.3+/V4 Addon Organizer



Version 1.34 - 20.05.2018

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## 4. Disclaimer

# 1. Overview

The Prepar3D V3.3f /V4 Addon Organizer (P4AO) is a simple application that will manage addons to your simulator with external XML files, as recommended by Lockheed Martin.

You can:

- Add or delete scenery and other addons
- Activate and deactivate existing addons
- Manipulate the order of your addon packages
- Change scenery layering
- Make a backup of your addon configuration files and restore it
- Import a scenery.cfg from a previous P3D/FSX installation
- Export the complete library in scenery.cfg format for other scenery related addons to use that have not been updated to P3D V3.3/V4 yet.
- Export all SimObjects paths to a simobjects.cfg file for other addons that for example need to find all aircraft.
- Compare checkpoints created with this app at different points in time, checking for changes to the simulators files.

The files being edited by this app are:

Prepar3D V3:

- C:\ProgramData\Lockheed Martin\Prepar3D v3\scenery.cfg
- C:\ProgramData\Lockheed Martin\Prepar3D v3\add-ons.cfg
- ..\AppData\Roaming\Lockheed Martin\Prepar3D v3\add-ons.cfg
- and the add-on.xml files in \Documents\Prepar3D v3 Files\add-ons\

Prepar3D V4:

- C:\ProgramData\Lockheed Martin\Prepar3D v4\scenery.cfg
- C:\ProgramData\Lockheed Martin\Prepar3D v4\add-ons.cfg
- ..\AppData\Roaming\Lockheed Martin\Prepar3D v4\add-ons.cfg
- and the add-on.xml files in \Documents\Prepar3D v4 Add-ons\

The P4AO will always create two backup files for each of them:

- The original file is renamed to "\*.orig"
- The last version before this change is saved as "\*.PSSCBAK"

## 2. Installation

### 2.1 Distribution

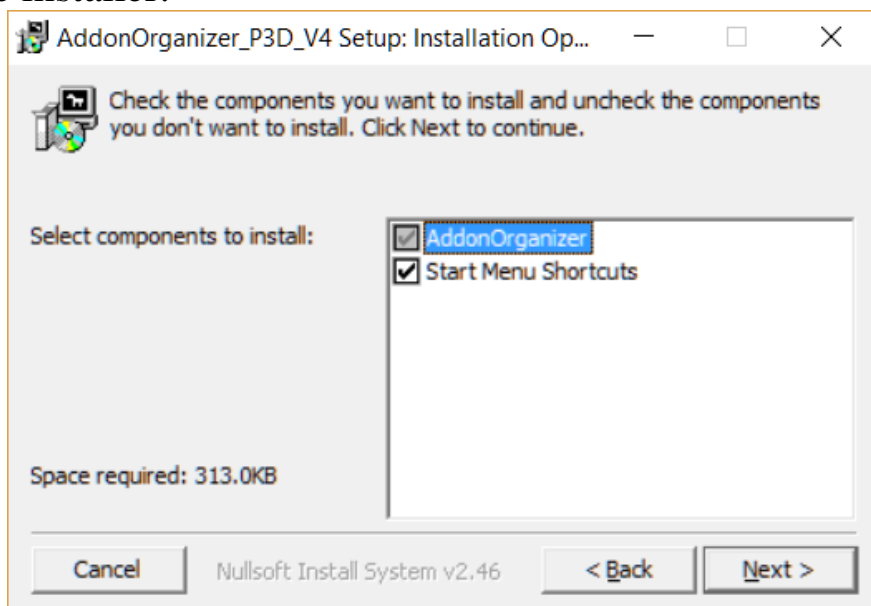
P4AO is distributed as a self-extracting installer package:

- *AddonOrganizer\_Install\_P3D\_V4.exe*

### 2.2 Installation

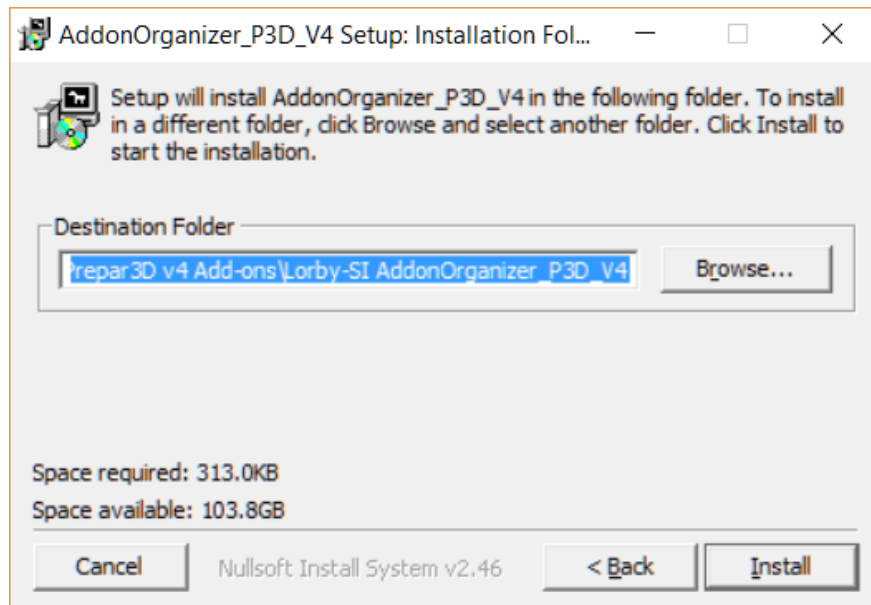
Double click on the installer file. The program will be installed by default into a subdirectory of your Documents\Prepar3D V4 Add-ons\ folder.

Running the installer:



On the first page you may select optional installation targets:

- “Start Menu Shortcuts”: P4AO will be added to your Start Menu (advised)
- On the next page you choose the installation path for P4AO.  
**THIS IS NOT THE PATH TO YOUR SIMULATOR DIRECTORY!**



- Selecting “Install” will begin the installation

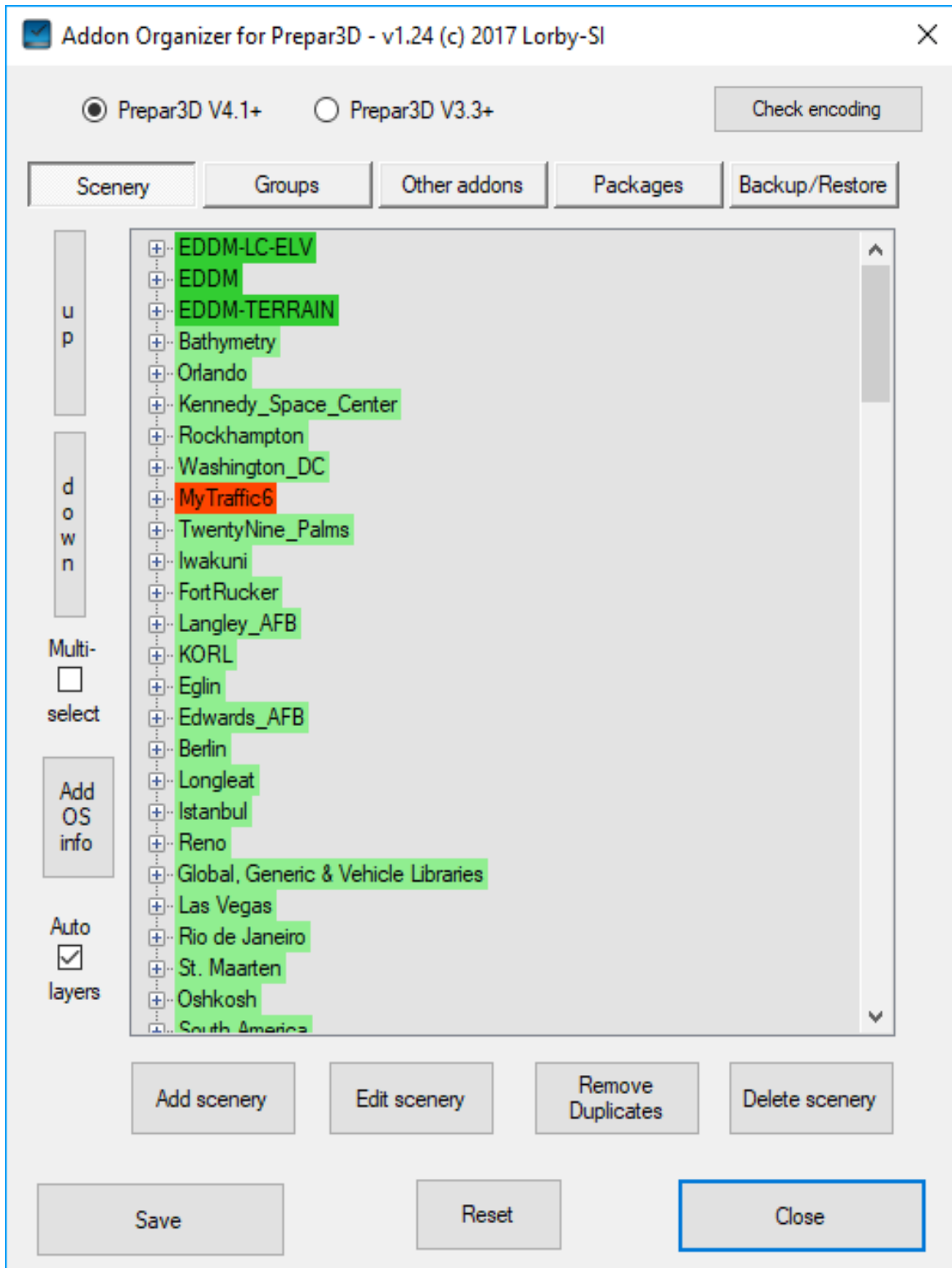
## 2.3 Microsoft .Net 4.6.2

To run the P4AO it is required that you have at least Microsoft .Net 4.6.2 installed on your computer:

<https://www.microsoft.com/net/download/dotnet-framework-runtime/net462>

# 3. Operations

## 3.1 Main Window



## Elements of the Main Window explained:

- **Green** entries are active, **red** ones are disabled
- Colors in the **treelist**: **Dark** coloration means the addon is in an add-on.xml, **light** colors designate the entries of the scenery.cfg
- **Radiobuttons Prepar3D V4 / V3.3+**: with these you can switch between managing V4 or V3.3 and later addons. Note that full XML functionality was introduced with P3D V3.3, it can not be guaranteed that the same principles will work with earlier versions or P3D!
- **Button “Check encoding errors”**: if this button is active, there are files in your simulator addon setup that don't have the proper character encoding. Clicking on it will show a list with those files. (Prepar3D V4 only)
- **Buttons “Scenery”, “Other addons”, “Packages” and “Backup/Restore”**: switch between the features of the application
- **Button “Reset”**: reloads all the configuration files. **All your changes will be lost!**
- **Button “Save”**: saves all your changes to the configuration files. **Nothing happens to your files until you press “Save”!**
- **Button “Close”**: will shut down LLTX.



## 3.2 Enabling and disabling addons

You can enable/disable (or “activate/deactivate”) individual components of the library packages.

But strictly speaking this is against the P3D specification, as it happens by reassigning the AddonComponents to a different nodename that is unknown to P3D (“Addon.Component.Disabled”). This will cause an entry in the content error log that P3D writes, but the addon component is no longer there either.

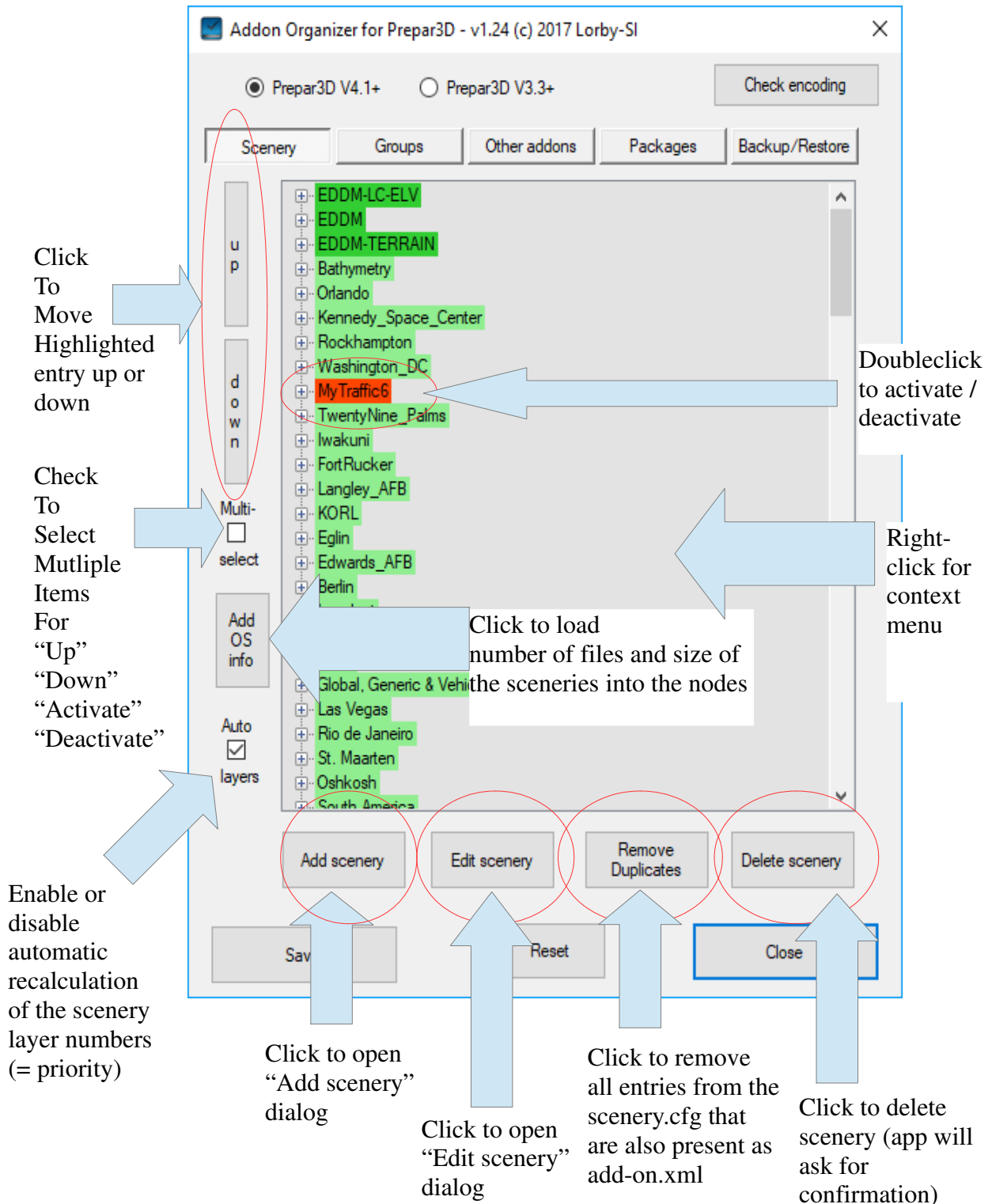
The correct way to disable content is to deactivate the complete addon package – and this will not cause any content errors.

If you choose to do the one or the other is up to you. Nothing bad will happen either way.

### 3.3 Manage Scenery

Scenery addons are managed on the first page of the dialog:

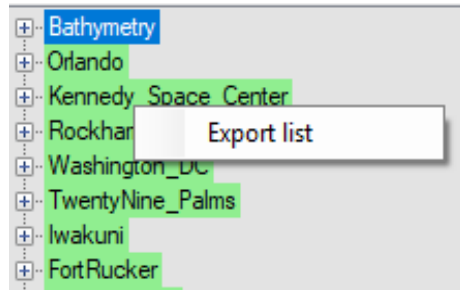
- **Green** entries are active, **red** ones are disabled
- Colors in the **treelist**: **Dark** coloration means the addon is in an add-on.xml, **light** colors designate the entries of the scenery.cfg



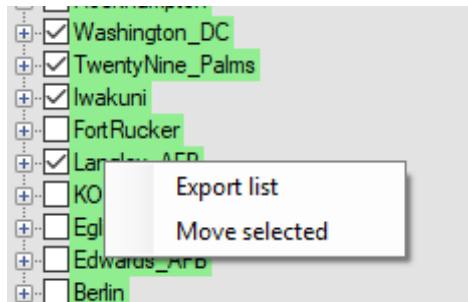
### 3.2.1 Right-click context menu

When right-clicking on the main list, a context menu appears:

#### 1. Multi-select not active



#### 2. Multi-select active



#### – **Export list**

Will create a HTML report of all entries in the list, containing a simple HTML table

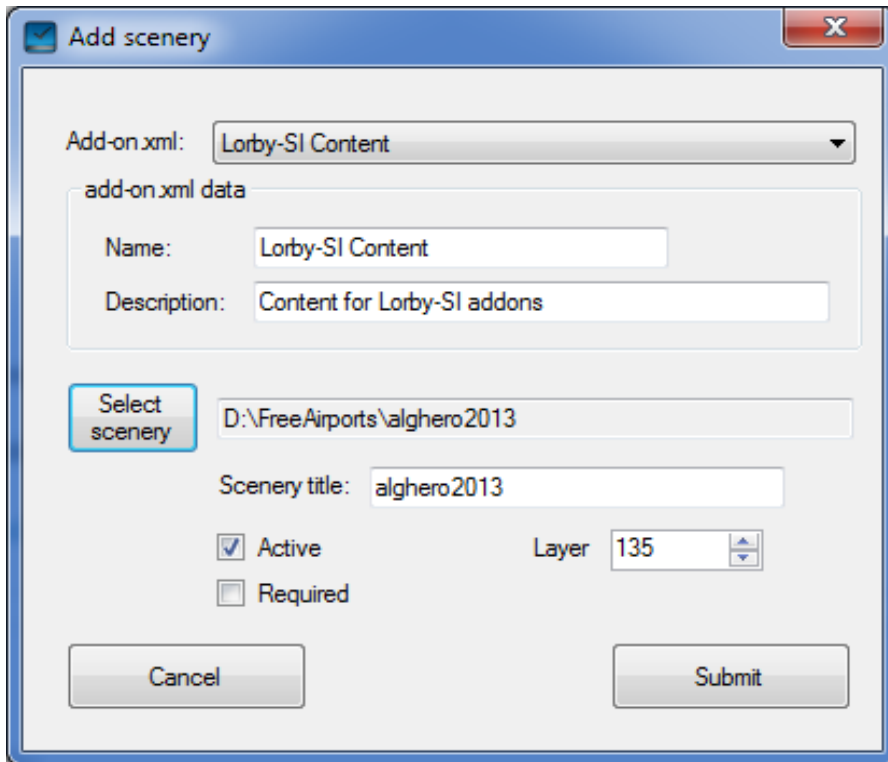
Layer	Name	Active	Source	Path
129	Bathymetry	True	scenery.cfg	Scenery\Bathymetry
128	Orlando	True	scenery.cfg	C:\Program Files\Lockheed Martin\Prepar3D v4\Scenery\Cities\Orlando
127	Kennedy_Space_Center	True	scenery.cfg	Scenery\Cities\Kennedy_Space_Center
126	Rockhampton	True	scenery.cfg	C:\Program Files\Lockheed Martin\Prepar3D v4\Scenery\Cities\Rockhampton
125	Washington_DC	True	scenery.cfg	C:\Program Files\Lockheed Martin\Prepar3D v4\Scenery\Cities\Washington_DC
124	TwentyNine_Palms	True	scenery.cfg	Scenery\Cities\TwentyNine_Palms
123	Iwakuni	True	scenery.cfg	C:\Program Files\Lockheed Martin\Prepar3D v4\Scenery\Cities\Iwakuni
122	FortRucker	True	scenery.cfg	Scenery\Cities\FortRucker
121	Lanham AFB	True	scenery.cfg	C:\Program Files\Lockheed Martin\Prepar3D v4\Scenery\Cities\Lanham AFB

#### – **Move selected**

Opens a second dialog, that allows you to move all selected entries to an add-on.xml file (new or existing one) or back into the scenery.cfg at the same time.

### 3.2.2 Add and edit scenery dialogs

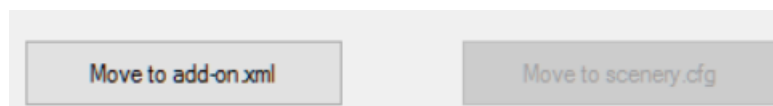
The add and edit dialog windows look and work the same.



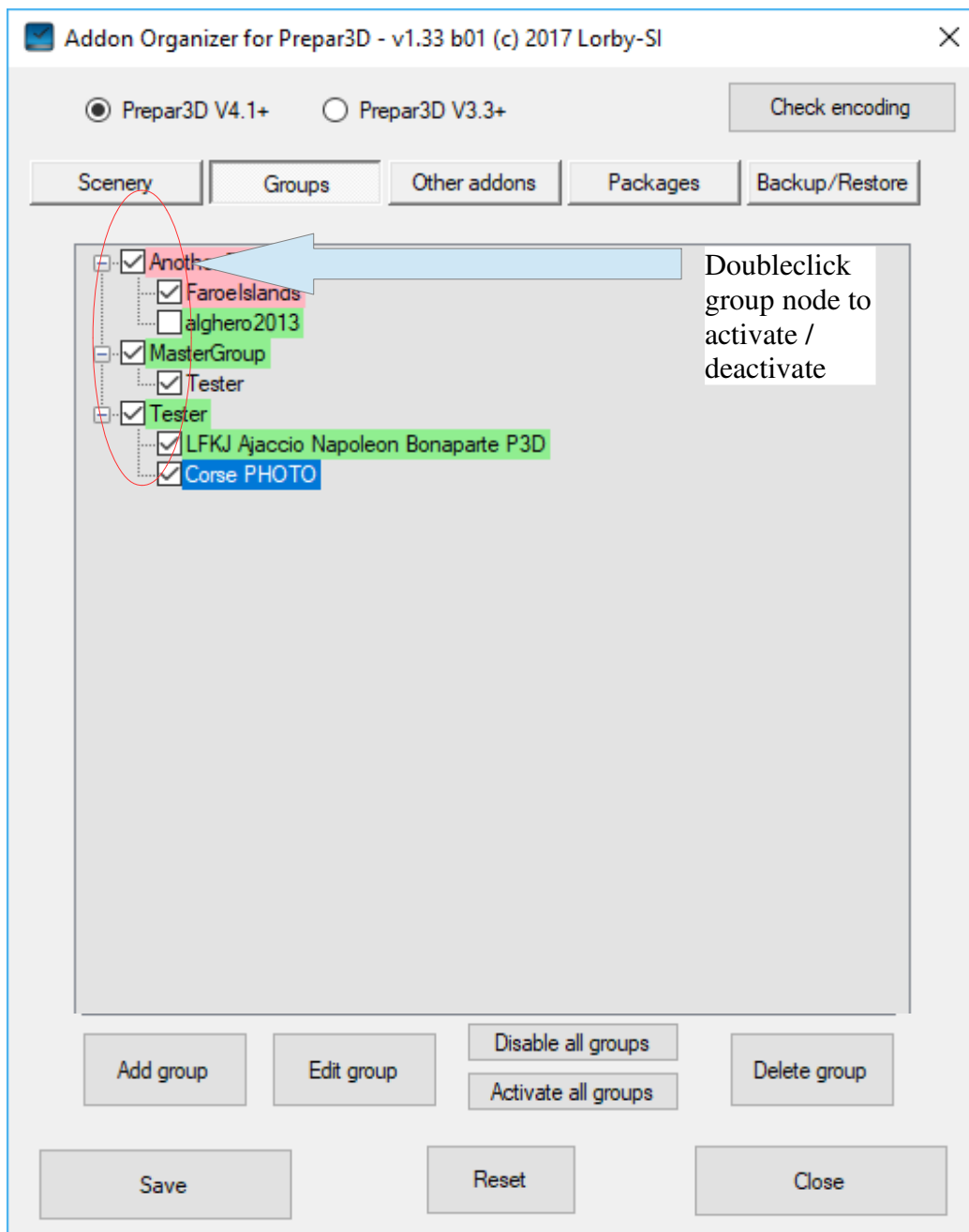
1. Choose if you want to add the scenery to an existing XML file or if you want to create a new one
2. Press “Select scenery” and navigate to the scenery folder. This is the folder containing the “Scenery” and “Texture” subfolders.
3. Alter the Scenery title if desired and set the desired layer number
4. If you chose to create a new add-on.xml, supply a name and description for it
5. Press “Save” to add the new scenery

**Note: the new configuration is not saved to disk yet – you must press “Save” on the main dialog to finally write it.**

Using these buttons on the **Edit Scenery dialog**, you can move a scenery from the scenery.cfg to an add-on.xml definition or the other way round:



## 3.4 Scenery groups



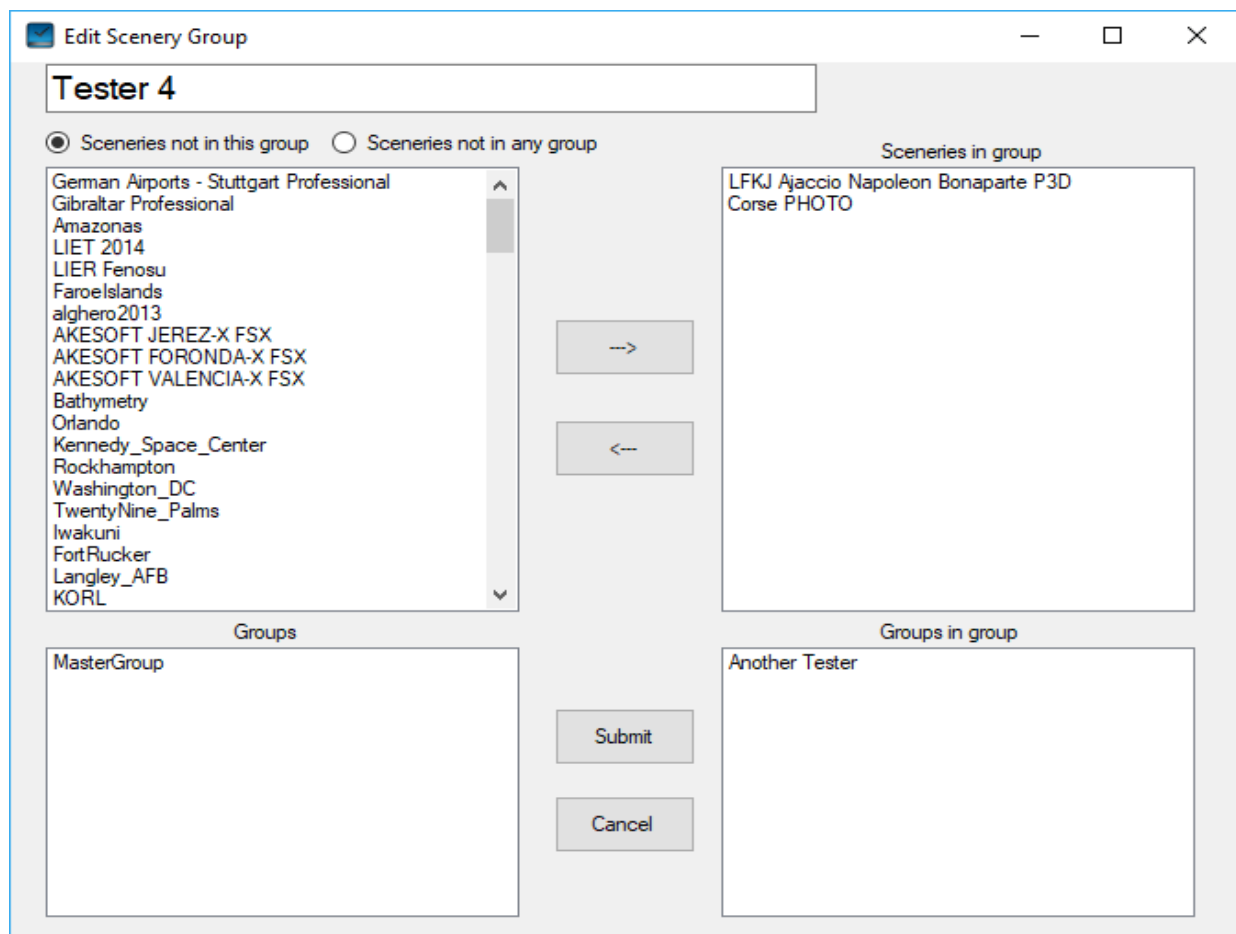
Scenery references are shown in light colors, group references are dark.

With scenery groups you can

- activate or deactivate large chunks of scenery at the same time by doubleclicking on the group node.
- Include or exclude items from the activation process with the checkboxes

You can create a group using the “Add group” button. The app will ask you to provide a unique name for the new group.

To add sceneries or other groups to a group, select the group node and use the “Edit group” button.



- Left side:
  - the upper list shows the sceneries that are not in this group, or not in any group, depending on the radio buttons above the list
  - the lower list shows the other scenery groups that are not referenced by the current group
- Right side:
  - sceneries that are in this group are shown in the upper list
  - other groups that are referenced by this group are in the lower list

You can move sceneries and groups in and out of the group by highlighting them with the mouse in either list and using the “<---” “--->” buttons to move the selection between them.

The button “Submit” will apply your changes – but they are only saved to disk with the main “Save” button.

### 3.5 Manage other addons

All other addons are managed on the second page of the dialog:

- **Green** entries are active, **red** ones are disabled
- Colors in the **treelist**: **Dark** coloration means the addon that have been installed in a fixed manner, **light** colors designate those that are automatically discovered by Prepar3D.

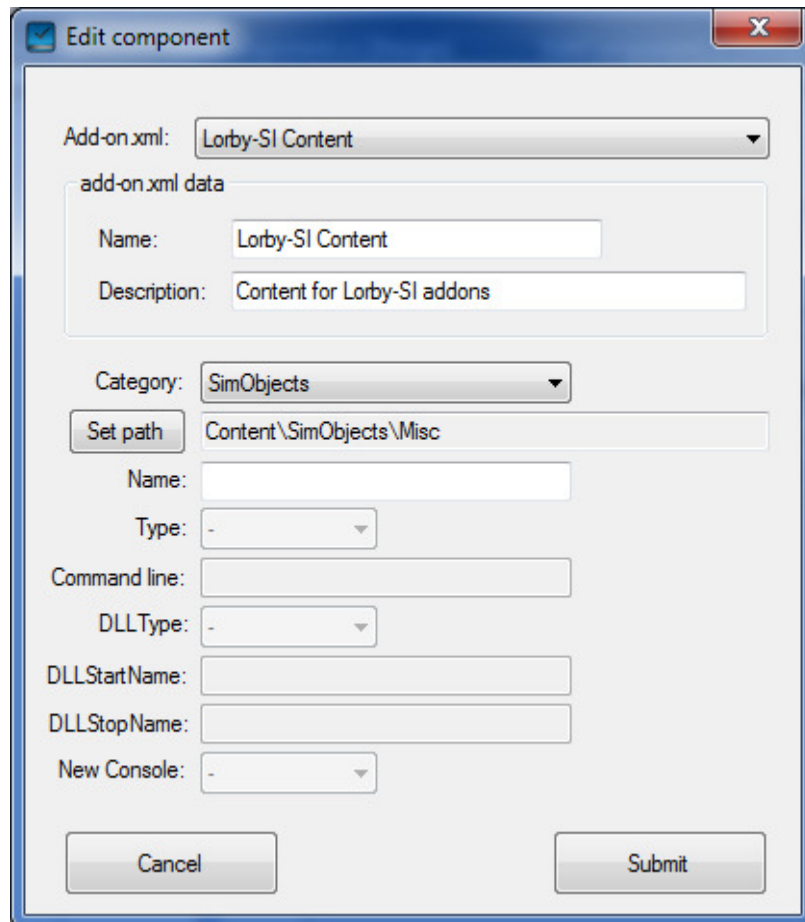
The screenshot shows the 'Addon Organizer for Prepar3D - v1.28 b01 (c) 2017 Lorby-SI' window. It features a tree view of addons, a list of active addons, and a list of external addons. Annotations include:

- Doubleclick to activate / deactivate**: Points to the tree view and the 'Active: True' checkbox in the 'Autogen' section.
- The grey entries have been read from the .cfg files. You can only activate or deactivate them by opening the node and doubleclicking on "Active".**: Points to the 'Autogen' section.
- This cfg entry contains a duplicate of an XML based reference**: Points to the 'SimObjects' entry in the tree view.
- Click to open "Add component" dialog**: Points to the 'Add component' button.
- Click to open "Edit component" dialog**: Points to the 'Edit component' button.
- Click to enable/disable all external addons**: Points to the 'Activate all' and 'Disable all' buttons.
- Click to delete component (app will ask for confirmation)**: Points to the 'Delete component' button.

### 3.5.1. Add and edit other addons dialogs

**You can only add, edit or delete XML based addons, not the grey entries.**

The add and edit dialog windows look and work the same.



1. Choose if you want to add or move the component to an existing XML file or if you want to create a new one
2. Press “Set path” and navigate to the folder with the content.
  - For SimObjects like aircraft this is the folder containing the aircraft directory, which in turn contains the aircraft.cfg or sim.cfg:  
If your aircraft is installed like this:  
“..\MyAircraft\Learjet\aircraft.cfg” then the path to select is  
“..\MyAircraft”
  - For all other categories it is the folder where the content is in,



- for example the folder that contains the gauges.
- For EXE and DLL type addons you have to navigate to the actual file
3. Alter the necessary fields if desired. Please consult the P3D V4 Learning Center for details (“SDK->Add-ons->Add-on Packages”)
  4. If you chose to create a new add-on.xml, supply a name and description for it
  5. Press “Save” to add the new component
- Note: the new configuration is not saved to disk yet – you must press “Save” on the main dialog to finally write it.**

### 3.5.2. Check for conflicts

This button will scan through all “other addons” and check for

- Name conflicts:

AddonComponents of the same category should not use the same name. The scan will alert you to possible conflicts.

The “Name” tag is optional, your best course of action is not to apply names to “other addons” at all when adding or editing them.

According to the spec, this ensures that no conflicts can arise.

Quoting the “Learning Center”:

Name  
(Optional)

An optional name for the individual component. For certain add-on components such as scenery components, it is highly recommended to have a component name since it will show in the UI. For scenery components, their name will show in the Scenery Library.

Note: Since Prepar3D's configuration system does not support components of the same category with the same name, be wary of creating a name that is not unique or it will overwrite the identically named component. However, if the component is not given a name, a name collision cannot occur.

- Multiple references:

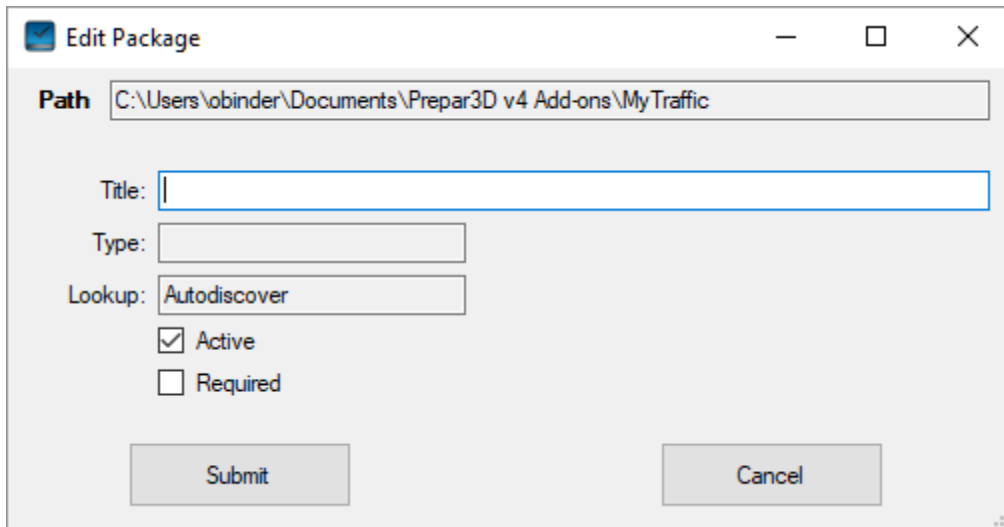
The scan checks if you have the same addon referenced more than once, for example in two different add-on.xmls or in an XML and the CFG at the same time. Strictly speaking, these conflicts don't constitute an error, your simulator may be working just fine.

## 3.6 Package view

- **Green** entries are active, **red** ones are disabled
- Colors in the **treelist**: **Dark** coloration means the addon that have been installed in a fixed manner, **light** colors designate those that are automatically discovered by Prepar3D.

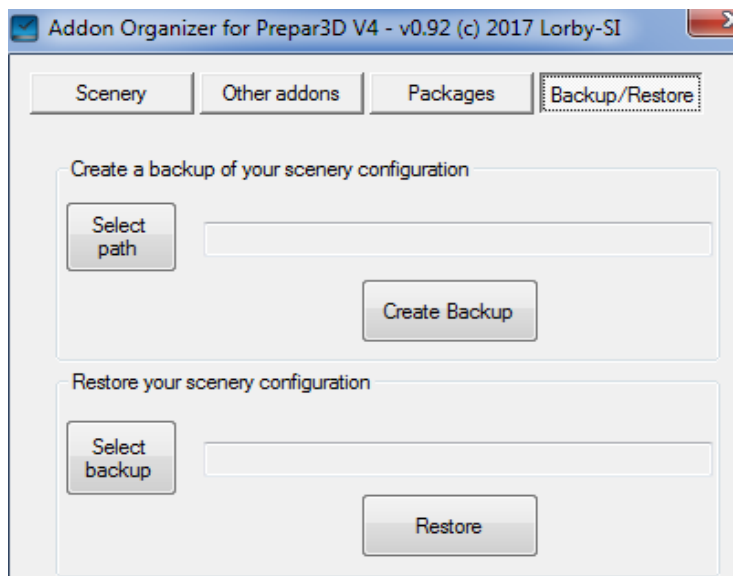
The screenshot shows the 'Addon Organizer for Prepar3D' window. At the top, there are radio buttons for 'Prepar3D V4.1+' (selected) and 'Prepar3D V3.3+', along with a 'Check encoding' button. Below this are tabs for 'Scenery', 'Groups', 'Other addons', 'Packages', and 'Backup/Restore'. The main area is a tree view of addons. A red circle highlights a specific package: 'C:\Users\obinder\Documents\Prepar3D v4 Add-ons\Lorby-SI RemoveAiSleepers\_P3D\_V4.exe'. A blue arrow points to this package with the text 'Doubleclick to activate / deactivate'. Below the tree view is a toolbar with buttons: 'Move up', 'Move down', 'Edit', 'Delete', 'Save', 'Reset', and 'Close'. Red circles are drawn around 'Move up', 'Move down', 'Edit', and 'Delete'. Blue arrows point from these buttons to text labels: 'Click to move selected item up in the list' (under 'Move up'), 'Click to move selected item up in the list' (under 'Move down'), 'Click to edit selected package' (under 'Edit'), and 'Click to delete selected item (app will ask for confirmation)' (under 'Delete').

### 3.6.1. Editing a package



Because packages are handled either by the sim itself (Autodiscover) or by the installers (fixed install) you can only change the optional Title and the Active/Required flags.

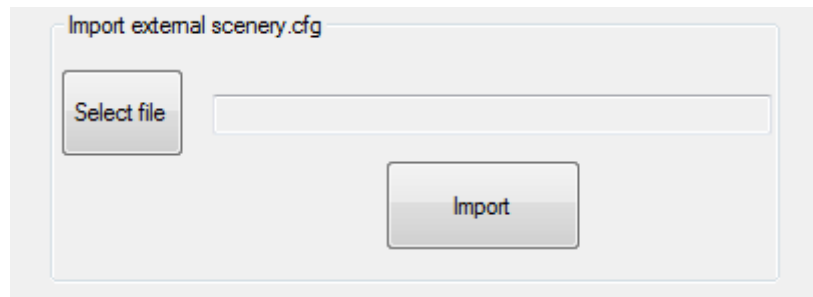
## 3.7 Backup and Restore



With this dialog you can create a backup of your addon configuration files (ZIP file format) and restore those files from a previously saved backup.

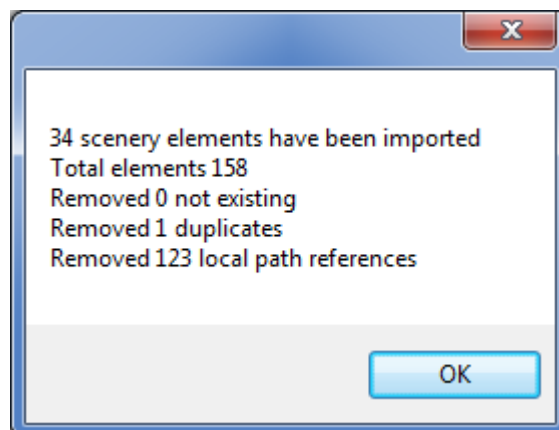
Note: this process will only back up the XML and CFG files, not the addon content itself!

## 3.8 Importing a scenery.cfg



An additional option is to import the data from an existing scenery.cfg file. Navigate to and select the file with the button “Select file”, then press “Import”. The app will scan the scenery.cfg for valid content, and group all that remains into a separate package named “Imported Scenery”.

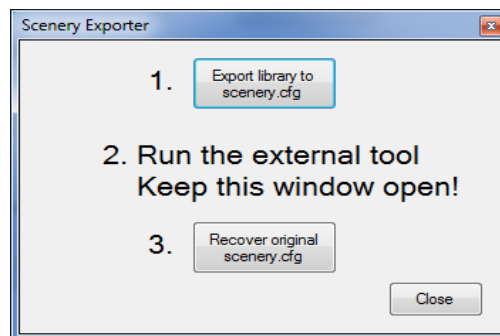
Note: relative paths, that were referencing scenery in the root folder of your old simulator, are not imported, and neither are duplicate entries or invalid folders.



## 3.9 Exporting the library in scenery.cfg format

This feature allows you to **temporarily** export the complete scenery library into your scenery.cfg file.

This is useful for example for MakeRunways or any other scenery related tool that needs to read your full library but that has not been updated to P3D V4 specification yet.



1. Pressing this button renames your existing “scenery.cfg” to “scenery.cfg.disabled” and then writes a new scenery.cfg containing all scenery areas from the configuration
2. Now run the external tool, for example “MakeRunways”.
3. When the tool has completed, press button “3.”, which will revert your “scenery.cfg” back to its original state.

Don't worry – if you forget to recover your scenery.cfg, the P4AO will do that for you when you close the window.

### Command line option:

You can export the library directly from the command line too:

```
P3D V4: P3DV4AddonOrganizer export allscenery.cfg
```

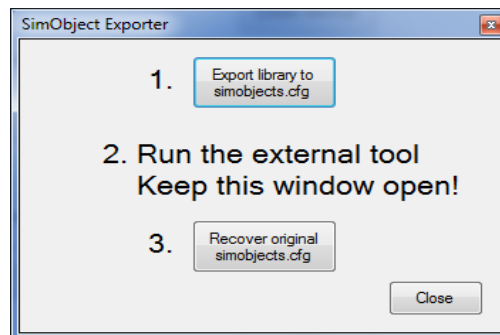
```
P3D V3: P3DV4AddonOrganizer export_V3 allscenery.cfg
```

This will create a file called “allscenery.cfg” containing the full library without altering your scenery.cfg

### 3.10 Exporting the sim object library in simobjects.cfg format

This feature allows you to **temporarily** export the complete sim object library into your simobjects.cfg file.

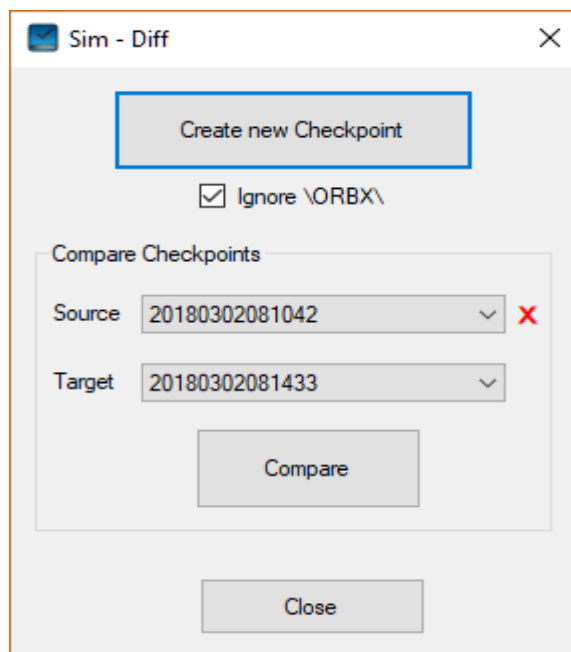
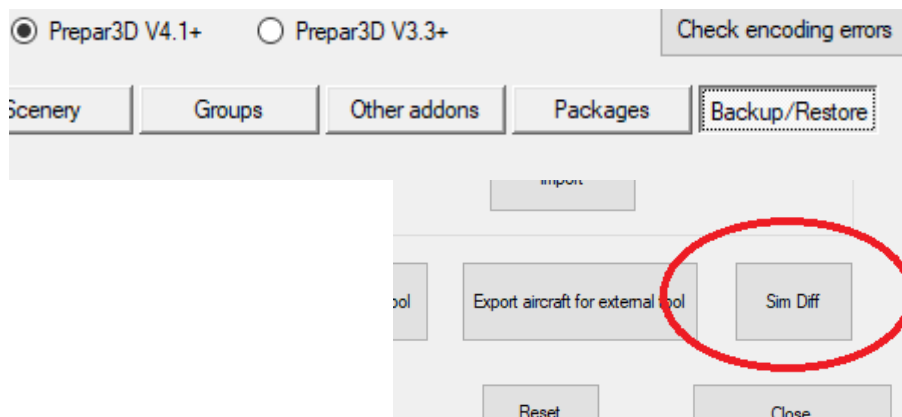
This is useful for example for effects or sound altering addons that have not been updated to P3D V4 specification yet.



1. Pressing this button renames your existing “simobjects .cfg” to “simobjects.cfg.disabled” and then writes a new simobjects.cfg containing all sim object discovery paths from the configuration
2. Now run the external tool.
3. When the tool has completed, press button “3.”, which will revert your “simobjects.cfg” back to its original state.

Don't worry – if you forget to recover your simobjects.cfg, the P4AO will do that for you when you close the window.

### 3.11 Sim - Diff



With the button “Create new Checkpoint” you can persist the current state of the simulator. ***This will take a long time***, because tens of thousands of files have to be evaluated to create the checkpoint.

Note 1: this checkpoint will only persist the current state of the core files, not their contents. (you will know that *something* has changed that file, but not what has been changed exactly)

Note 2: External addons will not be included in the checkpoint either, this method checks only the simulator core folders.

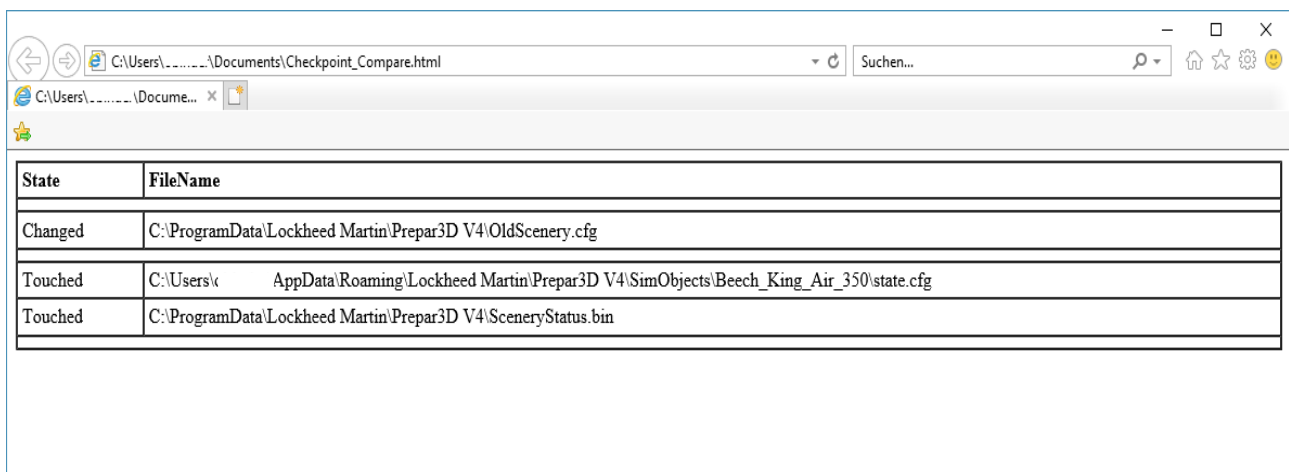
Clicking on the **red “X”** will delete the checkpoint that is currently selected in the “Source” box.

The checkbox “Ignore \ORBX\” will ignore ORBX's subfolder of the main simulator directory to speed up checkpointing.

## Comparing Checkpoints

By comparing two checkpoints taken at different points in time, you can create a HTML based list of all changes to core files in your simulator.

- Select the source (=old) checkpoint in the upper drop down
- Select the target (=new) checkpoint in the lower drop down
- Click “Compare”
- You will be asked where the resulting report should be saved
- After the processing is complete, the report will open automatically:



State	FileName
Changed	C:\ProgramData\Lockheed Martin\Prepar3D V4\OldScenery.cfg
Touched	C:\Users\c\AppData\Roaming\Lockheed Martin\Prepar3D V4\SimObjects\Beech_King_Air_350\state.cfg
Touched	C:\ProgramData\Lockheed Martin\Prepar3D V4\SceneryStatus.bin

The Diff report will show four distinct states of a changed file:

- *New*: this is a new file that wasn't there before
- *Changed*: the file size has changed
- *Touched*: the file size is the same, but the timestamp has changed
- *Deleted*: this file has been removed.



## 4. Disclaimer

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- the software will meet your requirements or expectations
- the software or the software content will be free of bugs, errors, viruses or other defects;
- any results, output, or data provided through or generated by the software will be accurate, up-to-date, complete or reliable;
- the software will be compatible with third party software;
- any errors in the software will be corrected or that any further development will take place
- the software will not cause errors or damage to the computer system it is installed on.

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