**How to use binary replace**

This is new type of the replace package. It can be used for replacing binary values in files.

# Structure of info\_binary.xml

This type of package also has new info.xml.

This is info\_binary.xml of „Disable Low FOV“ package:

<?xml version="1.0" encoding="utf-8" standalone="yes"?>

<PackageInfoBinary>

  <Games>

<Game>FC5</Game>

</Games>

  <DefaultInclude>false</DefaultInclude>

  <Name>Disable Low FOV</Name>

  <Description>Disables low FOV during actions like climbing, using the wingsuit, etc...

  [color=red]NOTE: This package changes some data in the game DLL file. If you'll experience serious bugs or crashes, disable this package.[/color]

  [color=red][b]NOTE: Tested only on game version 1.014[/b][/color]</Description>

  <Category>2</Category>

  <BinaryReplaces>

    <BinaryReplace>

<Files>

<File>bin\FC\_m64.dll</File>

<File MustExist="false">bin\_plus\FC\_m64.dll</File>

</Files>

      <FindBytes>C384D2741D</FindBytes>

      <ReplaceBytes>C384D27400</ReplaceBytes>

    </BinaryReplace>

  </BinaryReplaces>

</PackageInfoBinary>

The info has only one new node – *BinaryReplaces*. Other is the same as in info.xml.

## Note: In this type of package you can’t use any other info.xml and you can’t add new files to dat files.

# How does it work?

Before processing the *File* it is created its backup. The *File* is then opened and processed. More below.

## Node BinaryReplaces

It can contain as many replaces as you want. It has child nodes named as *BinaryReplace.*

## Nodes BinaryReplace

It contains *FindBytes* and *ReplaceBytes*.

## Node Files

This defines which files will be processed. Path is relative to the game install directory. If special parameter *MustExist* is defined and is set to **false** then it means that the file isn’t required, so Mod Installer will not show error if the file will not exist.

You can set as many files as you want.

## Node FindBytes

Bytes in hexadecimal value, this sequence of bytes will be searched in the *File*. String can contain spaces between bytes like C3 84 D2 74 1D.

## Node ReplaceBytes

Bytes in hexadecimal value, this sequence of bytes will replace the sequence defined in *FindBytes*. String can contain spaces between bytes.

# Using options

You can also use options for each *BinaryReplace* node. See example:

<?xml version="1.0" encoding="utf-8" standalone="yes"?>

<PackageInfoBinary>

  <Games>

<Game>FC5</Game>

</Games>

  <DefaultInclude>false</DefaultInclude>

  <Name>Disable Low FOV</Name>

  <Description>Disables low FOV during actions like climbing, using the wingsuit, etc...

  [color=red]NOTE: This package changes some data in the game DLL file. If you'll experience serious bugs or crashes, disable this package.[/color]

  [color=red][b]NOTE: Tested only on game version 1.014[/b][/color]</Description>

  <Category>2</Category>

<Options>

<Option ID="Fov" name="FOV">

<option name="Enabled" value="1" />

<option name="Disabled" value="0" />

</Option>

</Options>

  <BinaryReplaces>

    <BinaryReplace>

<Option ID="Fov">1</Option>

<Files>

<File>bin\FC\_m64.dll</File>

<File MustExist="false">bin\_plus\FC\_m64.dll</File>

</Files>

      <FindBytes>C384D2741D</FindBytes>

      <ReplaceBytes>C384D27400</ReplaceBytes>

    </BinaryReplace>

  </BinaryReplaces>

</PackageInfoBinary>

As you can see there is an additional *Option* node which defines for what option the *BinaryReplace* will be processed.

# Example of more BinaryReplace

<BinaryReplaces>

    <BinaryReplace>

<Files>

<File>bin\FC\_m64.dll</File>

<File MustExist="false">bin\_plus\FC\_m64.dll</File>

</Files>

        <FindBytes>7306F30F59DAEB04F30F5ECA</FindBytes>

        <ReplaceBytes>73060F1F4000EB040F1F4000</ReplaceBytes>

    </BinaryReplace>

    <BinaryReplace>

<Files>

<File>bin\FC\_m64.dll</File>

<File MustExist="false">bin\_plus\FC\_m64.dll</File>

</Files>

        <FindBytes>40555356574156488DAC24B0FDFFFF</FindBytes>

        <ReplaceBytes>B001C356574156488DAC24B0FDFFFF</ReplaceBytes>

    </BinaryReplace>

</BinaryReplaces>