

# TheAirline

## Migrating the SVN-repository step 1:

Changing and improving the SVN-Repository main structure for tagging release versions and branching side development.



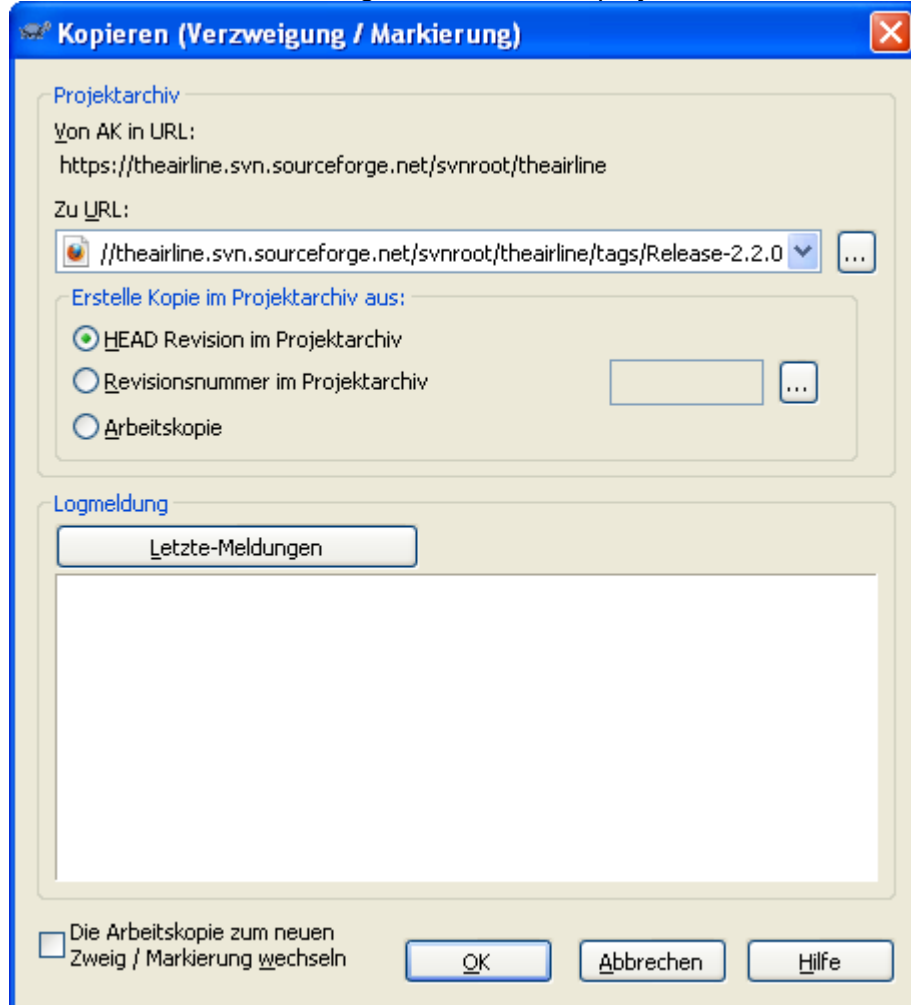
The change for setting up SVN-Client is to append „**trunk**“ to the end of the check out path. So on the client side the sandbox has the same look and structure like before, but not „All“ is checked out, only the trunk of the project.

On committing changes this has to be recognized that the check in is also to the „**trunk**“ folder.

## Tagging and branching

Check out the trunk Revision which should be tagged or branched. Recognize that you do not make any modifications inside the sandbox. Tagging or branching is always done of a specific Revision of the code.

Use the feature of the svn-client to create a tag or branch of the project. Here a screenshot of TortoiseSVN



tagging/branching using TortoiseSVN (after restructuring the SVN-Repository the original Path „Von AK zu URL:“ would be „<https://theairline.svn.sourceforge.net/svnroot/theairline/trunk>“)

This above shown configuration then builds a „cheap copy“ (not a real copy of the sources, but a link to the defined trunk revision) using the trunk's head revision and tag it in the „**/tags/Release-2.2.0**“ folder.

## Handling tagged revisions

on a tagged version code changes are **NEVER** done. The tags are only for the case to build a release version and have the possibility to take a look how the version 0.2.0 or 0.2.1 aso. was programmed.

```
TheAirline/
|
|--- branches
|
|--- tags
|   |
|   |--- Release-2.2.0
|       |
|       |--- TheAirlineV2/
|           |
|           |--- Data/
|           |--- GraphicsModel/
|           |--- Model
|           |--- Properties
|           |--- TheAirlineV2.csproj
|       |
|       |--- TheAirlineV2.sln
|
|--- trunk
|   |
|   |--- TheAirlineV2/
|       |
|       |--- Data/
|       |--- GraphicsModel/
|       |--- Model
|       |--- Properties
|       |--- TheAirlineV2.csproj
|   |
|   |--- TheAirlineV2.sln
```

Example for a tagged release named *Release-2.2.0*

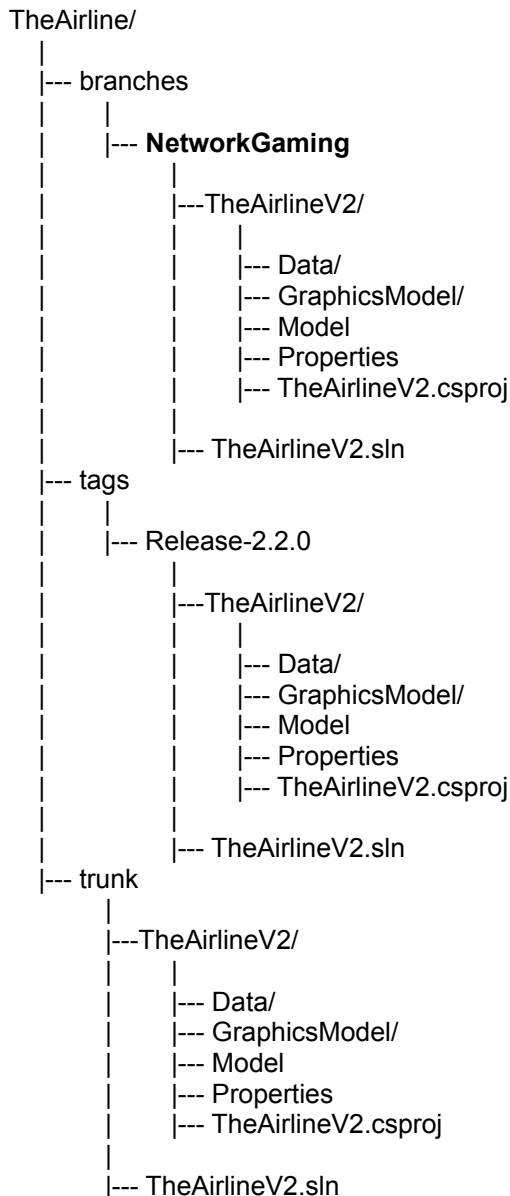
Checkout command for Release-2.2.0:

`svn co https://theairline.svn.sourceforge.net/svnroot/theairline/tags/Release-2.2.0 theairline`

## Branches

Branches are used for side by side development. Think of extending the game for multiuser gaming with a client and server solution. Normally this extended feature has a „long running“ development process, so that the next official Release is deployed before the client-Server solution for network gaming is fully implemented.

The normal developers work on the trunk and extend and improve the game for the next Release and the Network-Developer works on the „Networking“ branch for implementing the Client-Server-solution. After the network-solution is implemented and fully tested, this branch will be merged back in the official trunk and for the next Release Network-gaming will be available in the release.



**Example of a branch for development of NetworkGaming parallel to the trunk evolution.**

## Bugfixing of an official Release

Example thinks o a Software Version 2.2.0

An official Release is tagged from development trunk in the „**/tags/Release-2.2.0**“ folder. For bugfixing a branch eg. „**/branches/Bugfixing-2.2.x**“ is created and the bugs are fixed.

While the development version which resides in the „**/trunk**“ is beeing further developed for preparing version 2.3.0, the bugs for Release-2.2.0 are handled in parallel in the „**/branches/Bugfixing-2.2.x**“.

Before releasing the Release-2.3.0 the fixed bugs are remerged from the bugfixing branch 2.2.x back in the trunk.

After remerging the fixed bugs in the trunk, the development version is tested and then tagged as „**/tags/Release-2.3.0**“

Next development round starts....

On the right there is an example for a bufixing branch

### Conclusion:

**Independend which version you check out, at the client side you see alwas the identical structure of the software. The difference is, that you select a different path at checkout. Your working copy looks always same and you need not to hurry up on system paths.**

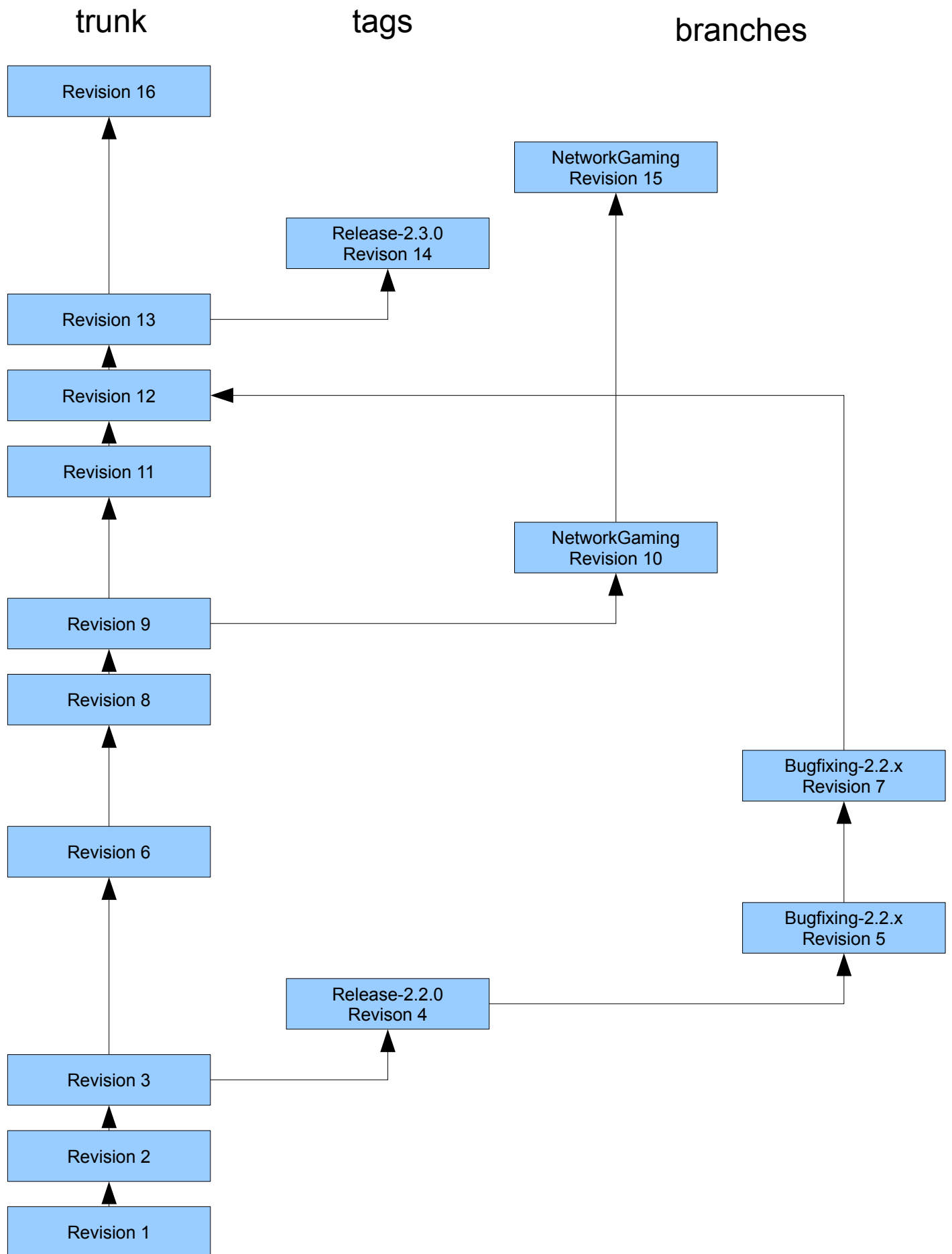
Ich you check out the trunk you will see in your local sandbox folder the Solution file „TheAirlineV2.sln“ and the Project folder „TheAirlineV2“. This ist the same view in your local sandbox folder as you would see if you checkout the Release-2.2.0, oder the Bugfixing-2.2.x or the NetworkGaming.

Only the content of the versions are different.

<Client Sandbox folder>/

```
|---TheAirlineV2/
|   |
|   |--- Data/
|   |--- GraphicsModel/
|   |--- Model
|   |--- Properties
|   |--- TheAirlineV2.csproj
|
|--- TheAirlineV2.sln
```

```
TheAirline/
|
|--- branches
|   |
|   |--- NetworkGaming
|   |   |
|   |   |---TheAirlineV2/
|   |   |   |
|   |   |   |--- Data/
|   |   |   |--- GraphicsModel/
|   |   |   |--- Model
|   |   |   |--- Properties
|   |   |   |--- TheAirlineV2.csproj
|   |   |
|   |   |--- TheAirlineV2.sln
|   |
|   |--- Bugfixing-2.2.x
|   |   |
|   |   |---TheAirlineV2/
|   |   |   |
|   |   |   |--- Data/
|   |   |   |--- GraphicsModel/
|   |   |   |--- Model
|   |   |   |--- Properties
|   |   |   |--- TheAirlineV2.csproj
|   |   |
|   |   |--- TheAirlineV2.sln
|   |
|   |--- tags
|   |   |
|   |   |--- Release-2.2.0
|   |   |   |
|   |   |   |---TheAirlineV2/
|   |   |   |   |
|   |   |   |   |--- Data/
|   |   |   |   |--- GraphicsModel/
|   |   |   |   |--- Model
|   |   |   |   |--- Properties
|   |   |   |   |--- TheAirlineV2.csproj
|   |   |   |
|   |   |   |--- TheAirlineV2.sln
|   |
|   |--- trunk
|   |   |
|   |   |---TheAirlineV2/
|   |   |   |
|   |   |   |--- Data/
|   |   |   |--- GraphicsModel/
|   |   |   |--- Model
|   |   |   |--- Properties
|   |   |   |--- TheAirlineV2.csproj
|   |   |
|   |   |--- TheAirlineV2.sln
```



*Example for Revision number evolution in SVN. You see, every comit increases the revision up +1*