General Game Structure

- A game consists at least of one scene, a scene is usually located at a certain gps position
- A scene consists at least of two states: a background and a fallbackstate. The background state is always active for the whole scene. The fallback state is entered if no other (except the background state) is active. A new state can either be created by double clicking into the mapview, or by select *newstate* from the state menu.
- A state should hold at least one asset. Otherwise it has no purpose. An asset can either be an audiofile, a Pure Data patcher, or an RwaScript (only audio and PdPatcher are working at this moment).
- All views render by default the last touched scene, state and asset. Therefore, if a state is touched within the Mapview, the Stateview automatically renders the same state.

Mapview

Tools

- Arrow: double clicking in Mapview creates a new state. Clicking on an existing state selects it; click and drag moves an existing state; click+drag on the map moves the map
- Rubber: deletes a state.

Show assets/radii

- Blue speaker: shows or hides assets in mapview
- Circle: shows or hides radii in mapview

Start/Stop Simulation

- Green Triangle: starts simulation
- Red Button: stops simulation

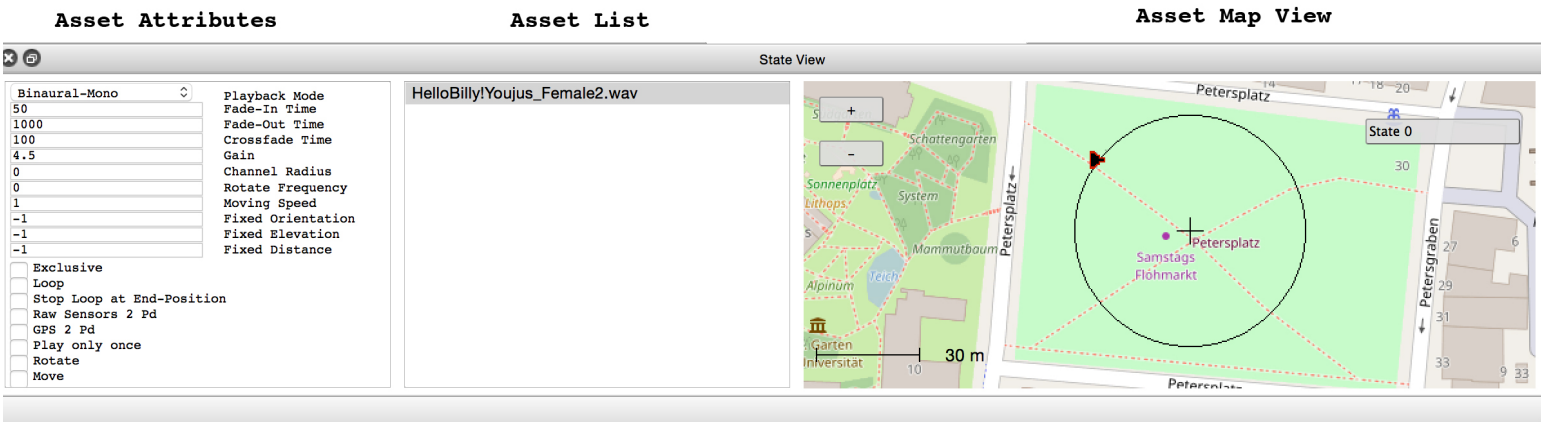
Enter scene location (needs internet connection)

- Enter the scene location; suggestions are made by open street maps nominatim server

Menus

- Select Scene: select the current scene
- Select State: select the current state; map moves automatically to the selected state
- Scene Menu: allows for creating a new scene; delete the current scene; other options not working yet
- State Menu: allows for creating a new state; so far the only way to create a non-gps state

Stateview



General Usage

In the Asset List, assets can be added via drag & drop; so far only .wav and .aif files are working. After adding an asset, it appears instantly in the Asset Map, where it can be placed with the mouse. Clicking on an asset either in the list or the map selects the corresponding asset; its attributes are shown in the Asset Attributes list and can be edited there. Several assets can be selected by holding down the “Apple”- Key and clicking on the assets in the list. Their attributes then can be edited together.
An asset can be removed from a state with the “Delete”- key, if it is selected.
Click+drag allows for editing the state radius.

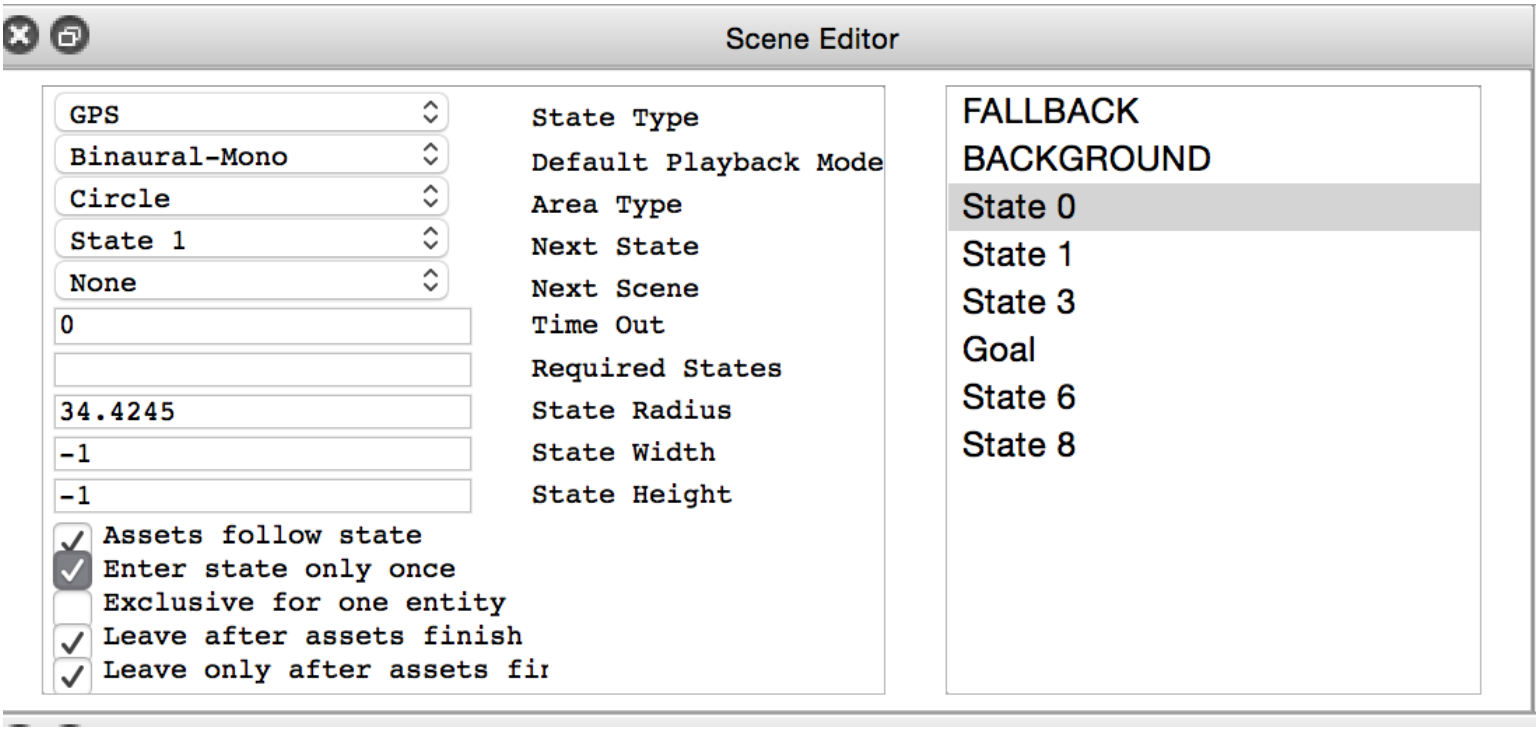
Asset Attributes

- Playback Mode: auto types are not working yet, choose binaural or mono/stereo
- Fade-In Time:
- Fade-Out Time:
- Crossfade Time: crossfade time if loop is activated
- Gain:
- Channel Radius: distance from center for multichannel binaural playback
- Rotate Frequency: XXX
- Moving Speed: in m/s for moving assets, if attribute Move is activated
- Fixed Orientation: assets keeps the same orientation relative to the player after entering the corresponding state, independent from the specified asset coordinates
- Fixed Elevation:
- Fixed Distance: asset stays at specified distance after entering the state, independent from the specified asset coordinates
- Exclusive: XXX

- Loop: asset will be looped with the specified crossfade time
- Stop Loop at End-Position: loop playback will stop after reaching the end position
- Raw sensors to pd: XXX
- GPS to pd: XXX
- Play only once: XXX
- Rotate: XXX
- Move: if activated, asset will move from specified start to specified end position. The coordinates can be edited in the Asset Map View.

- Damping Function: Whether asset volume is affected by distance; if so, either linear oder exponential
- Damping Factor: factor in front of the Log Function, a value of 20 is natural damping in free-field (combined with damping trim of 1)
- Damping Trim: factor before the clipping occurs, 1 is for free field
- Damping Min: minimal damping factor
- Damping Max maximal damping factor
- Min Distance: minimal possible distance to the corresponding asset.

Sceneview



Selected states can be removed with the Delete-Key. The selected state is visible in the state attributes list.

- State Type: only GPS and other are working so far.

- Default Playback Mode: default playback mode for all state assets.

- Area Type: circle or rectangle or square.

- Next State: automatically enter the specified state as next state (use together with "Leave after assets finish" attribute)

- Next Scene: automatically enter the specified scene as next state (use together with "Leave after assets finish" attribute)

- Time Out: exit state after the specified time

- Required States: entry condition, state is only entered if the specified states have been visited already.

- State Radius:

- State Width:

- State Height:

- Assets follow state: in editing mode, assets are moved together with the state

- Enter State only once: state can only be entered once

- Exclusive for one Entity: not in use yet

-Enter Offset: offset in meters for entering a state radius; default is -6

-Exit Offset: offset in meters for leaving a state radius; default is 0

- Leave after assets finish: exit state when assets are no longer active.
“Leave after asset finish” is useful for “nextState” sequences:
If the hero enters a state where the attribute “nextState” or “nextScene” is set, this state/scene will be entered automatically after all assets finished playing.

- Leave only after assets finish: entity stays in the state as long as assets are active, even if the player is outside the state radius. If a state contains any looped assets, the attribute “Leave only after assets finish” should not be activated, otherwise the state is never exited because the assets never finish. Its purpose is rather to guarantee, that the hero gets all necessary information even if she already left the state radius. In this case, all assets will be played until the end and only afterwards the state will be left.

New Features

- **New State Area Type Polygon**: new edges are created by double clicking on the line somewhere between two edges; edges are deleted by double-clicking on an existing one; edges can be moved via mouse dragging

- **State Menu -> New State from Current:** creates a copy from the current active state including all assets at the same position

- **Up to 40 binaural mono voices:** With crossfades between states 30 voices per state should be no problem.
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- **(ABER: Im Moment sind nur 30 mono und 15 Stereo und jeweils zwei 5Kanal und zwei 7Kanal möglich, da sonst das starten der App so ewig lange dauert, weil die Legacy EARPLUG~ Synthese auch noch geladen werden muss..)**

- **Lock State Position & Lock Asset Position**

- **Disable Fallback** – Scene Attribute: Man bleibt im State bis man einen neue Betritt. Für States in states (Stege, Bank etc.) muss dann das State Attribute „State within state“ aktiviert werden, damit man beim Verlassen des Stegs zurück in den äusseren State fällt.

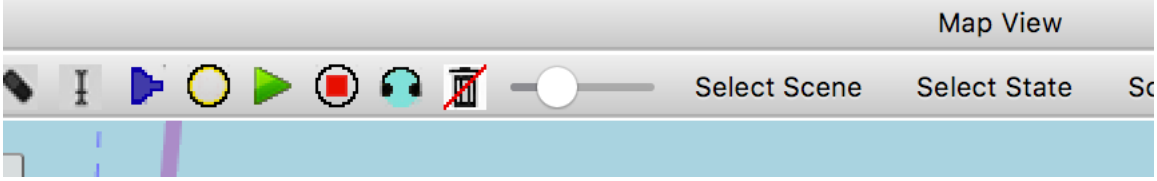
- **Scene Menu – „New Scene from selected States“** – Neue Scene aus den im Scene View selektierten States. Unbedingt FALLBACK und BACKGROUND mit markieren. Damit Scenes positionsbedingt erreicht werden können, muss das Scene Attribute „Level“ den gleichen Wert haben. Dann kann man von einer Scene in die andere laufen. Scene Begrenzungen sollten sich nicht überschneiden.

- **Scene Menu – „Copy Selected States to Clipboard“**

- **Scene Menu – „Paste States to Current Scene“**

- **Asset Attribute “Allow individual channel positions”:** Für Multichannel Playback; erlaubt individuell (via Mouse) positionierbare Channelpositions.. Ist per default immer ausgeschaltet und speichert auch nicht, da man sonst beim editieren zu oft Fehler macht..

- **Asset Attribute Playback Mode „Binaural7Channel“**



Trash Icon: Falls durchgestrichen, werden Assets nur im Projekt, aber nicht im Asset Ordner gelöscht.. (Macht Sinn, wenn man Save As benutzt..)