FS-ATC-Chatter 1.2.3

User's Guide

4/24/2023
Stick and Rudder Studios

Table of Contents

Change Log

Version	Changes
1.2.3	• Created an installer program • Changed the URL of the clips update server
1.2.2	• Updated the Regions folder in the purchased version archive to include all the latest clips • Fixed a bug where you could not tune any 8.33 Khz spacing frequencies using the nearest facilities dialog • Changed clip updates to use HTTP for all actions
1.2.0	• Improved default COM database to more closely match FS2020 • Added an ability to check for an update the clip collection from within the player
1.0.0	• Initial Release

Table 1

Release Notes

1.2.3

- Created an installer program
- Changed the URL of the clips update server

1.2.3 Is now distributed as a Windows installer exe rather than a zip file. Simply run the installer and select the location you want to install FS-ATC-Chatter. If you already have an older version of FS-ATC-Chatter installed select the location of that older version. The FS-ATC-Chatter installer will remember the location on subsequent runs.

We have created a dedicated clip update server that is on a different server from the Stick and Rudder Studios web site. FS-ATC-Chatter 1.2.3 is now using the new clip update server.

1.2.2

- Updated the Regions folder in the purchased version archive to include all the latest clips
- Fixed a bug where you could not tune any 8.33 Khz spacing frequencies using the nearest facilities dialog
- Changed clip updates to use HTTP for all actions

1.2.0

This version contains an improved default-navdata.sqlite file which should more closely match the FS2020 simulator's scenery and COM frequencies. It should reduce the need to run the navdatareader tool.

This version also has new functionality to check for the addition of new clips to the purchased collection and will allow you to download those updates right from within the player. After starting the player go to the settings dialog and select the miscellaneous tab. If you had purchased and installed the full clip collection you should see a "Check Now" button on the clip update option.
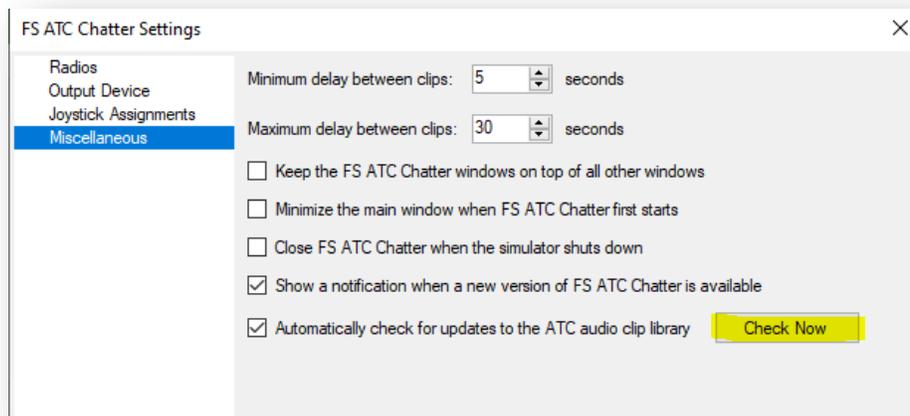
If you just have the demo collection you can purchase the full clip collection with over 45,000 ATC clips by visiting:

https://www.stickandrudderstudios.com/fs-atc-chatter-overview/

Introduction

FS-ATC-Chatter is a set of air traffic control audio chatter files that either a stand-alone player or Pilot2ATC can play back. The clips have been edited so that each one contains a single exchange between a pilot and an ATC facility. When necessary the audio has been edited to remove any glaring location specific phrases so that the clips can be played back for a general region of the world regardless of the departure / destination airports and which ARTCC centers are used. As an example the exchange "Boston Tower, United 6626, clear of active" would be changed to "Tower, United 6626, clear of active". No attempt was made to change references to SIDS, STARS, runways, taxiways, and specific waypoints.

The clips are organized by world region and then by controller type. The directory structure below the region folders matches what Pilot2ATC needs to playback controller specific audio.

Licensing

The audio clips in FS-ATC-Chatter are copyrighted material. They were derived from LiveATC.net archives and are being distributed under a licensing agreement between Stick and Rudder Studios, LLC. and LiveATC.net.

- You have the right to use these files for personal, non-commercial use in a flight simulator on a single PC.
- You may not redistribute them or the included stand-alone player in any way including
  - Posting them on the internet
  - Embedding them in another product
  - Transmitting or sharing the files with a third party in any way
- You may not make any derivative audio files from the included clips
- You may make a backup copy of the files for archival purposes
- You may use the player and installed clips to make flight videos. We do request that you provide a reference link to FS-ATC-Chatter in your video posting

When you purchase X-ATC-Chatter or FS-ATC-Chatter the primary thing you are buying are the clips. Neither the X-ATC-Chatter player nor the FS-ATC-Chatter players are keyed. This allows you to purchase either FS-ATC-Chatter or X-ATC-Chatter and use it with either player on Pilot2ATC, X-Plane, FSX, FSX Steam Edition, P3D , and / or MSFS 2020.

The bottom line is you DO NOT need to pay twice.

Installation

Stand Alone Player

The demo distribution of FS-ATC-Chatter is a single Windows installer file: FS-ATC-Chatter-Setup-1.2.3-Demo.exe.

After downloading the EXE file simply run the executable, agree to the license agreement, and select the location you want to install FS-ATC-Chatter. This would typically be the root of your C or D drive but it can be on any drive or sub folder of your choosing. Don't put it in any of the simulator folders as it does not run as a plugin but rather as a separate and independent program. Also, do not put in your Windows program files folders.

Note: Windows Defender may complain about the installer as an unrecognized application.

Simply click the More info link and select Run anyway:

The installer gives you the option to create start menu and/or desktop icons.

FS-ATC-Chatter_1.2.3_Demo.exe contains the stand-alone player, documentation, and approximately 400 sample clips for the U.S. region. You can purchase the full collection with over 45,000 clips from the Stick and Rudder Studios website:

https://www.stickandrudderstudios.com/purchase-fs-atc-chatter/

If you already own X-ATC-Chatter and you wish to populate FS-ATC-Chatter with the full clip set simply copy the Regions folder from the X-ATC-Chatter archive to the root folder of FS-ATC-Chatter allowing windows explorer to replace any duplicate files. After restarting FS-ATC-Chatter the region clip counts should show the full set.

Clip Collection

If you purchase the full clip collection the FS-ATC-Chatter-Setup-1.2.3-Full.exe file that you will download from either Sim Market or Gumroad if you purchased on the Stick and Rudder Studios website, will contain a fully populated Regions folder containing over 45,000 clips across multiple regions.

The installation procedure is the same for the full clip set installer and the demo installer. The full clip set installer EXE file is quite large as it contains the fully populated Regions folder. Any anti-virus software and might take some time to check the large installer EXE when you first run it. It may take some time for the License Agreement dialog to appear.

Periodically Chatter Project Volunteers will submit new clips to the collection. FS-ATC-Chatter can check for clip updates by going to the settings dialog and miscellaneous tab:
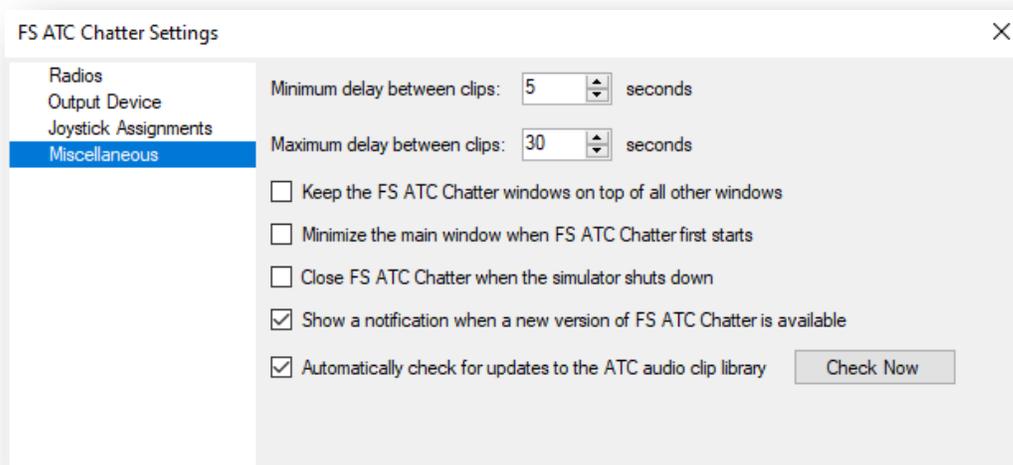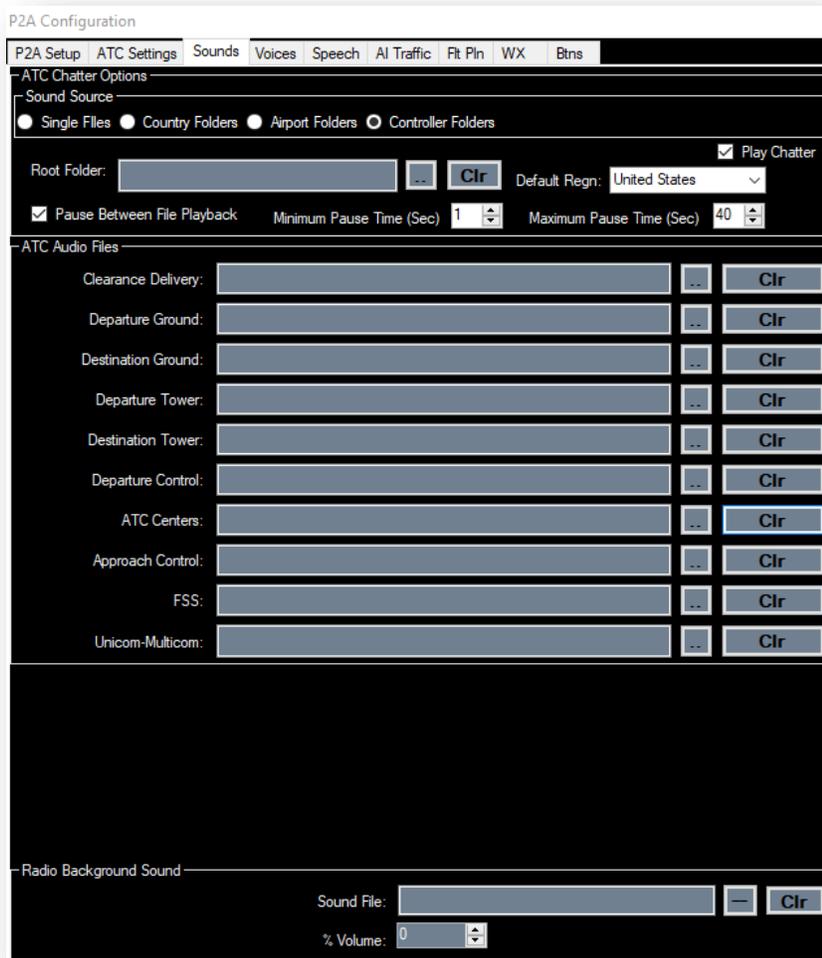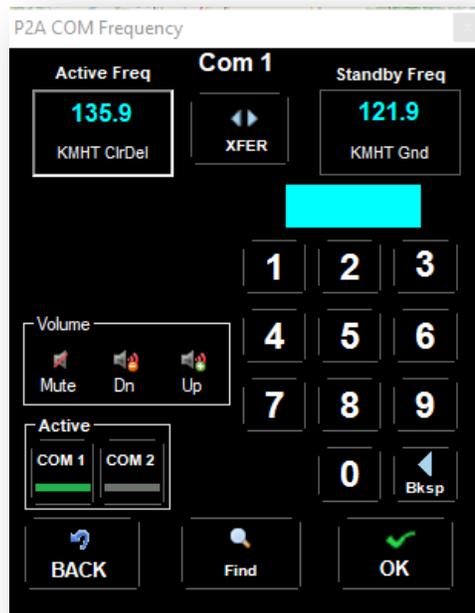
Pilot2ATC

The clip collection for FS-ATC-Chatter can also be used with Pilot2ATC. If you are planning to use the collection with Pilot2ATC there is no need to run the stand alone player as Pilot2ATC has a built-in chatter player. You simply need to copy the Regions folder to the Pilot2ATC\Sounds\ATC_Chatter folder.
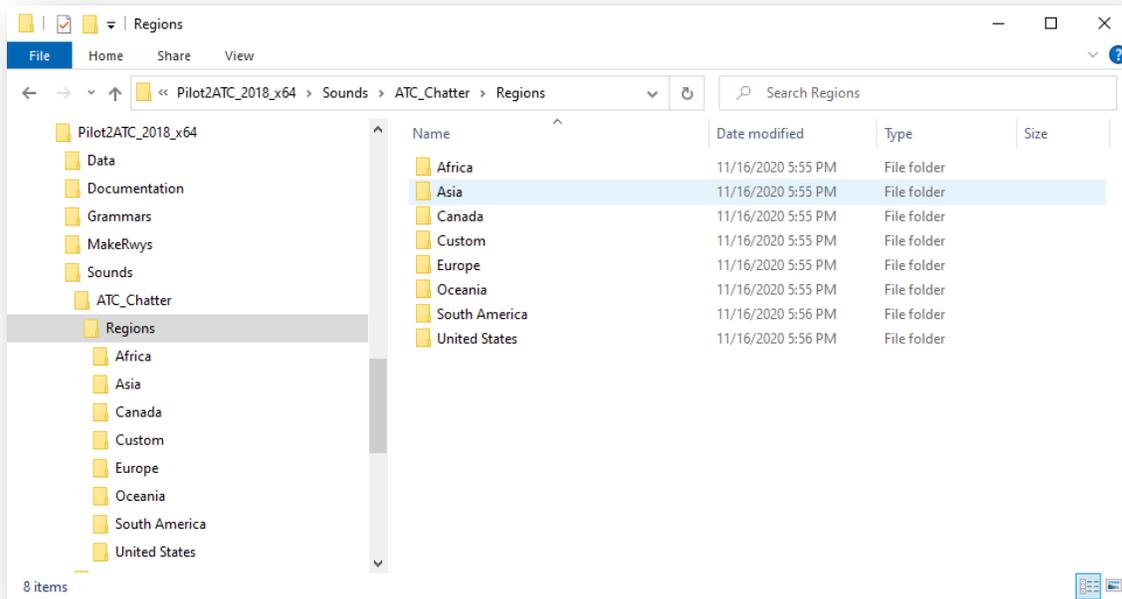
You will also want to configure the Pilot2ATC Sounds settings so that you are using Controller Folders. Use the Default Region dropdown to pick which region you want to hear clips from.

You will also need to make sure that you have the volume turned up on the Pilot2ATC radios. Click on the COM1 / COM2 standby frequency to open the audio panel. Use the volume buttons to adjust the radio volume.

Refer to the Pilot2ATC user guide for additional information on how to configure chatter playback. Should you run into problems you can visit the Pilot2ATC support forum:

https://www.avsim.com/forums/forum/713-pilot2atc-users-forum/

Platform Support

FS-ATC-Chatter only supports the Windows operating system. Is has been tested on Windows 10 but will also support Windows 7. Windows XP is not supported.

FS-ATC-Chatter was build using Visual Studio 2019 and targets the .NET Framework version 4.8. If you are running on Windows 7 it may be necessary to update the .NET framework if the version installed is lower than 4.8.

FS-ATC-Chatter does need write access to its root folder so be careful about placing the FS-ATC-Chatter folder in any of the windows systems folders where write / read permissions might be an issue.

FS-ATC-Chatter supports FSX, FSX Steam Edition, P3D V1 through V5 and MSFS 2020.

Using the Stand-Alone Player

Connecting to the Simulator

If you install FS-ATC-Chatter on the same computer as your simulator then FS-ATC-Chatter should be able to connect to the simulator with no modification.

If you plan to operate FS-ATC-Chatter on a remote computer you will need to rename the file SimConnect-Sample.cfg to SimConnect.cfg. Use notepad to edit the file and change the Address and Port number to match your FS2020 / P3D system.

You may need to modify your SimConnect.xml file on the simulator. To allow remote connections please take a look at this thread on FSDeveloper for more material on this.

https://www.fsdeveloper.com/forum/threads/simconnect-from-a-remote-computer-to-msfs.448828/

General Operation

The default stand-alone player settings will play clips based on the frequency you are tuned to on the radio and the type of facility that is near your aircraft that is associated with that frequency. This is known as automatic controller mode.

In the figure below we are parked at KLEB and tuned to 121.600 on COM1 which is the ground facility. We have the United States region selected and the player is playing ground MP3 chatter files using a random delay between clips.
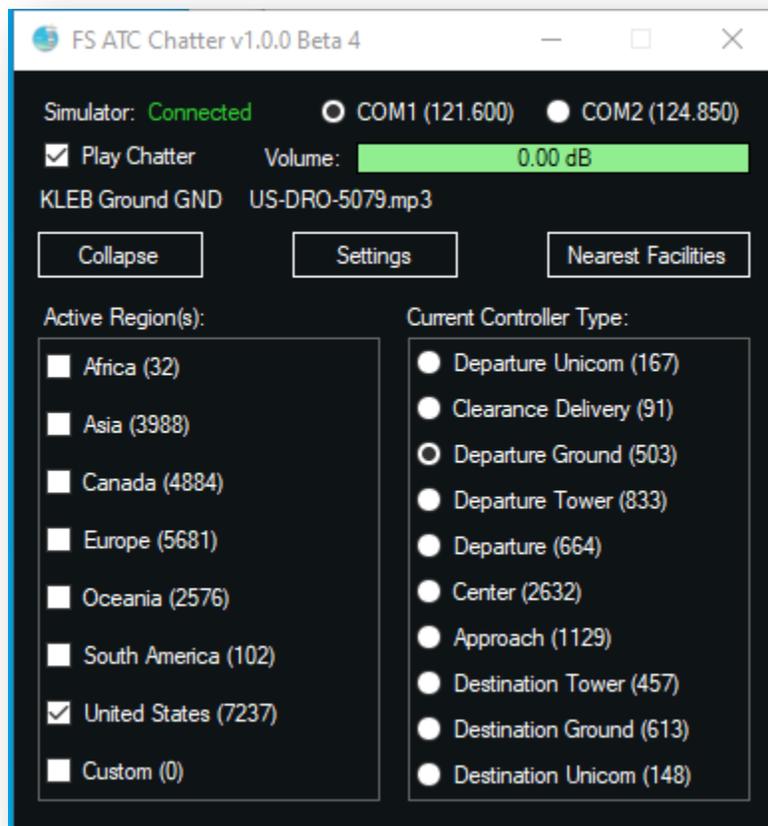
You can start and stop the chatter using the Play Chatter check box and you can adjust the playback volume using the Volume slider. You can also select multiple regions to give you a larger clips set to play.

Combining regions might only make sense where clips have a common dialect, such as the United States and Canada.

The numbers next to the regions show the total clip count available for that region. The numbers next to the controller check boxes show the sum of the clips across the selected regions for that controller type.

When using the default Automatic Controllers mode you will not be able to manually select the controller type.

Custom Region

The stand-alone player supports a Custom region where you can place any of your personal chatter clips. In order to use this simply place mp3 files in the various controller folders under FS-ATC-Chatter\Regions\Custom\Controllers.

One use case for the Custom folder is to allow you to collect facility specific chatter for a particular flight. You can go to LiveATC.net and download ground, tower, approach, and departure clips for a specific flight between airports where LiveATC.net has coverage. Since it may be difficult to capture an accurate sequence of en-route center chatter you could populate the Custom\Controllers\ctr folder with a copy of the center clips from another region while having airport and approach and departure specific clips in the other Custom controller folders.

Settings

The settings dialog allows you to adjust how the player operates.

Radios

The automatic controllers option will automatically select the type of chatter to play based on the frequency you are tuned to and nearest facility type within 100 NM of your aircraft's position. If you disable this option you will be able to manually select the type of chatter you want to hear regardless of the state of the radios.

The select center controller type option will always play center chatter whenever the radio is tuned to 123.275. This may be useful if you are flying in an area where the com database does not have accurate center frequencies and transmitter locations.

The radio power option will verify that your radios have power before playing any chatter. Please note that this option requires the aircraft to properly maintain the radio power simulator variables. If the chatter is paused due to radio power and the radios are powered up then we recommend you submit a bug report to the aircraft designer so they can fix the issue. You may need to disable this option for those aircraft that are not behaving properly.

The use transmitter enabled radio option will instruct the player to monitor the frequency on the radio that is enabled for transmit to determine which controller type is tuned. If you disable this you can select the radio to monitor on the control panel.
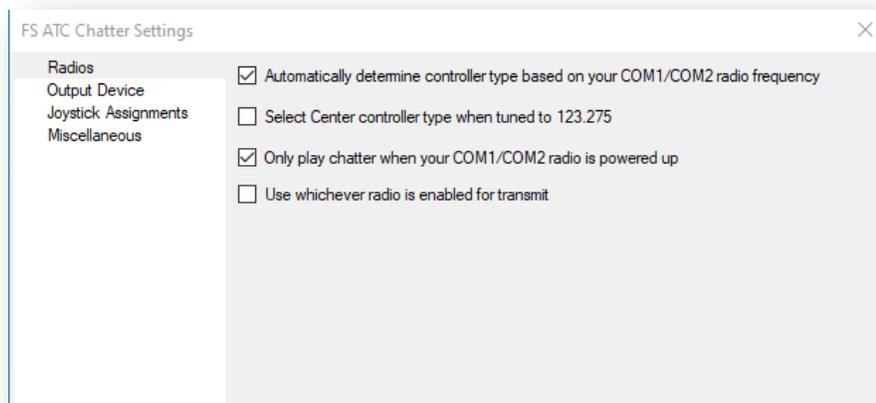
Output Device

This allows you to choose the audio device you want to hear the chatter on.
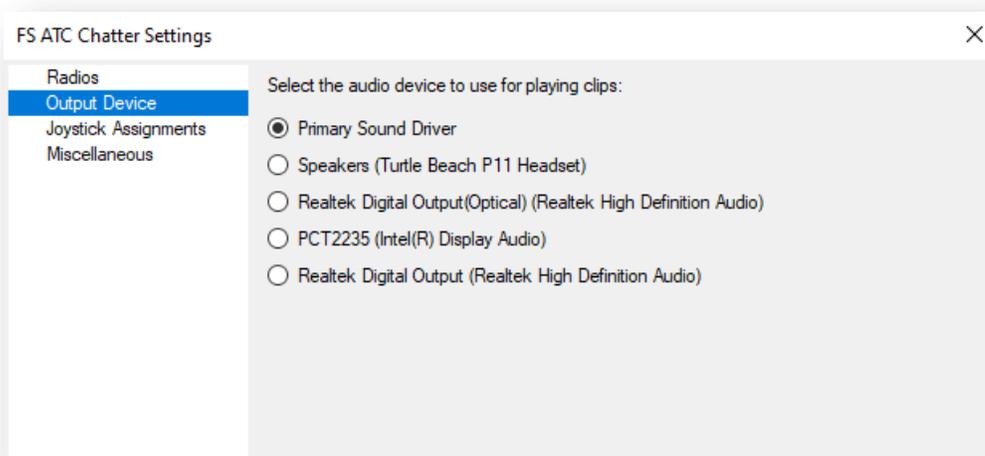
Joystick Assignments

There are five operations you can map to a joystick button.

1. Toggle the Play Chatter on and off
2. Momentarily mute a clip while the assigned button is pressed. Acts like a push to talk switch so you can practice your own radio communications without chatter interference
3. Select the previous controller type
4. Select the next controller type
5. Toggle Visible will toggle the FS-ATC-Chatter windows between open and minimized

Operations 3 and 4 only work when you are NOT using automatic controllers.

To assign a joystick to an operation click the assign button and then operate the joystick button. Use clear to un-assign the joystick button to that operation.
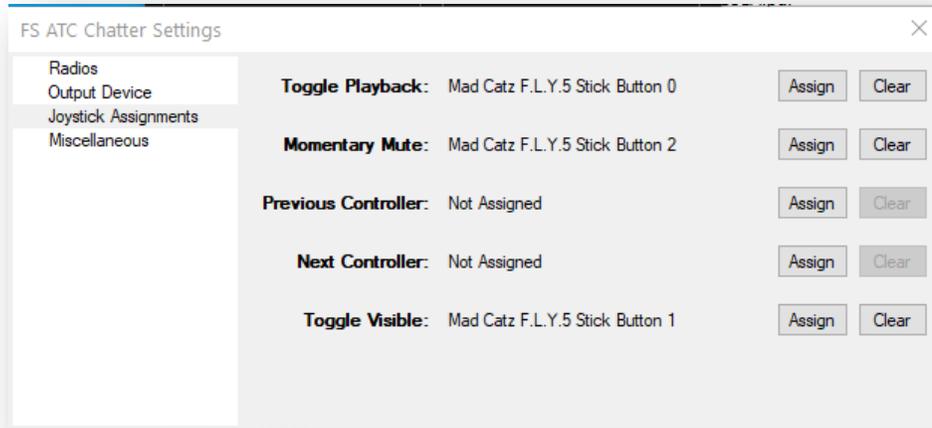

Miscellaneous Settings

- The minimum and maximum delays allow you to control how often chatter will be played.
- Keep FS-ATC-Chatter on top will keep the chatter windows on top of all other windows
- Minimize on start will have the FS-ATC-Chatter control panel minimized when you start the program
- Close FS-ATC-Chatter when the simulator shuts down
- Show a notification when there is a new version of the FS-ATC-Chatter player
- Check for new clips in the purchased clip collection
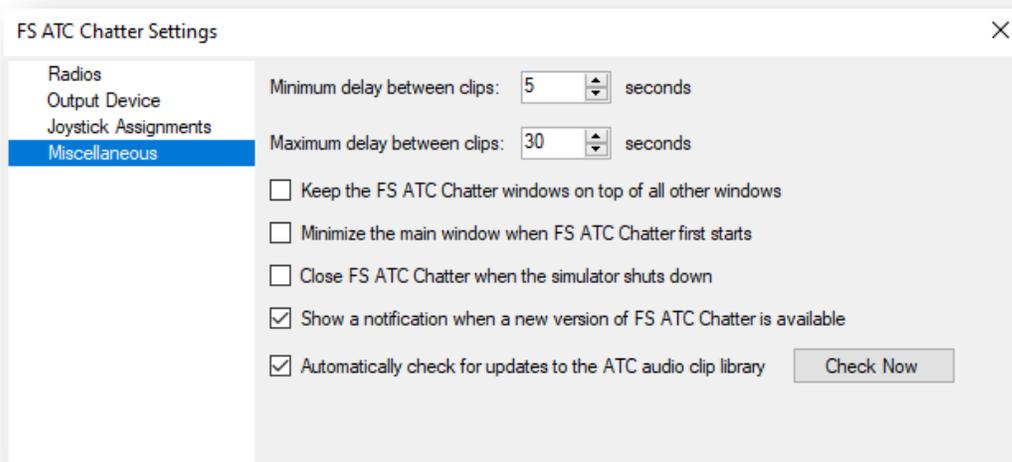
Nearest Facilities

The nearest facilities window will show you those ATC facilities that are near your aircraft. It shows the closest 40 facilities based on the filters that are within 100 NM of your aircraft.
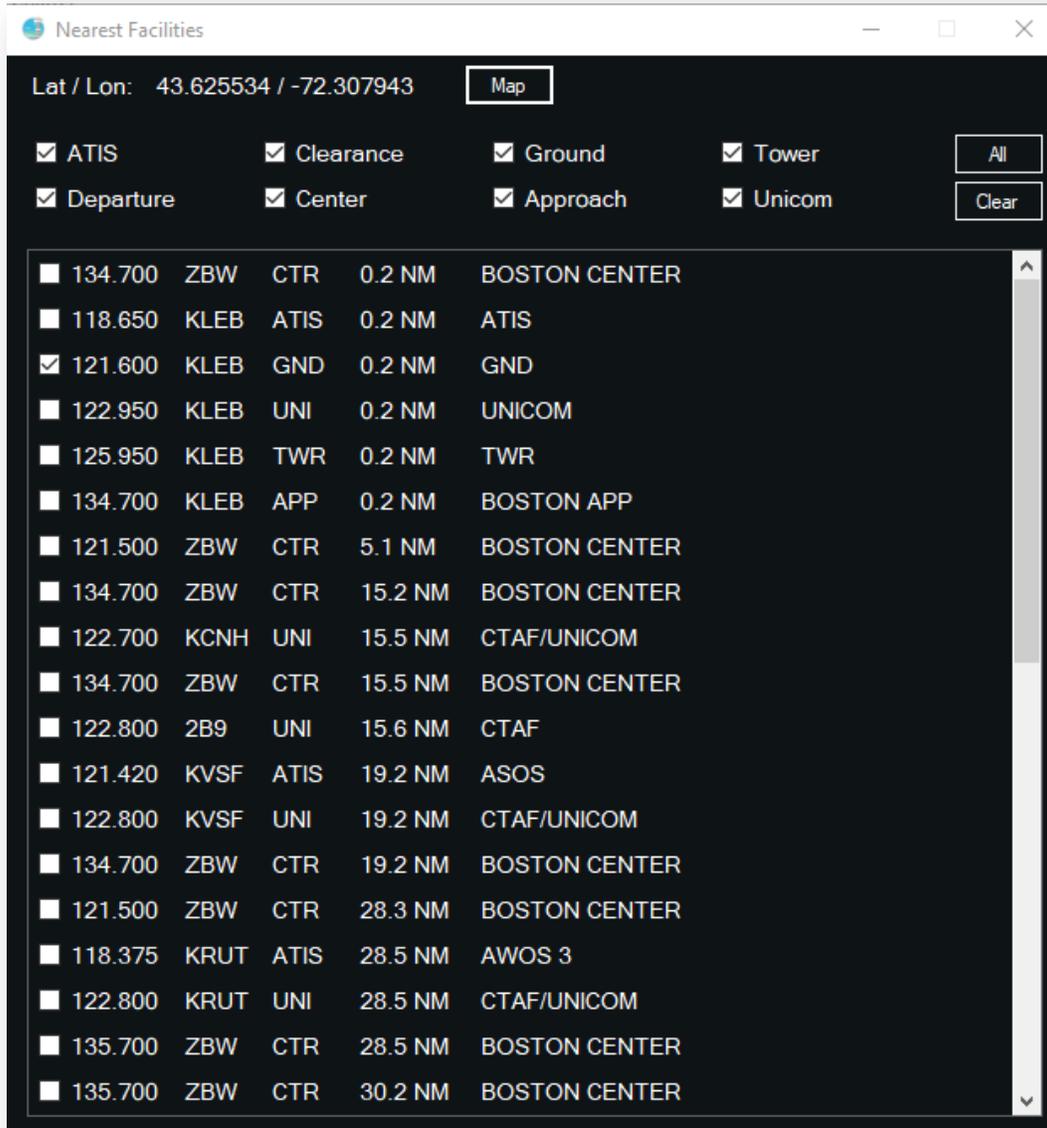
You can use the filter check boxes to only show nearby facilities of a particular type. If your radio is tuned to one of the nearby facilities the check box will be checked. You can also click on an unchecked check box in order to have FS-ATC-Chatter automatically tune your radio to that frequency.

Note: You can use the Map button to open a Google Map in your default browser at your plane's current latitude and longitude.

Keyboard Focus

One of the challenges using other applications with desktop simulators is the simulator window will lose focus when you click on another window, like FS-ATC-Chatter. In some simulators, like FSX and P3D, this can cause the sim to enter pause mode unless you disable that action with a setting. In most cases a loss of keyboard focus will cause any keyboard / action mappings to stop working until the simulator window regains input focus.

If you are using automatic controllers with FS-ATC-Chatter you usually do not need to interact with the chatter window and it might actually make sense to minimize the chatter window. However, you may like to use the nearest facilities list to tune your radios. If you do click on a nearby atc facility to tune the radio then your simulator will lose focus.

Windows 10 has a feature where any window you hover the mouse over for a brief period of time will automatically regain focus. You can learn how to turn this feature on with this link:

https://www.addictivetips.com/windows-tips/select-a-window-on-mouse-hover-windows-10/

With this Windows feature enabled all you need to do is move your mouse back over the simulator window and it will be automatically activated and accept keyboard input again.

Updating Frequency Database

FS-ATC-Chatter ships with a pre-built frequency database. We have tried to make the frequency database closely match FS2020 however this database may not match frequencies associated with the airports in your simulator's scenery data.

If you find a mismatch that is affecting your usage of FS-ATC-Chatter you can optionally have FS-ATC-Chatter use a SqLite navaigation database that can be created with a free open source tool called NavDataReader:

https://github.com/albar965/navdatareader/releases

NavDataReader is a command line tool that is able to scan the FSX, P3D or FS2020 scenery files and create a Sqlite database file that FS-ATC-Chatter can use for facility frequencies.

FS-ATC-Chatter will look for the database in the root FS-ATC-Chatter folder. The name of the file that it tries to read is based on the type of simulator you are connecting to:

File Name	Connected Simulator
navdata-Fsx.sqlite	FSX
navdata-FsxSe.sqlite	FSX Steam Edition
navdata-Prepar3dV2.sqlite	P3D V2
navdata-Prepar3dV3.sqlite	P3D V3
navdata-Prepar3dV4.sqlite	P3D V4
navdata-Prepar3dV5.sqlite	P3D V5
navdata-Msfs.sqlite	MSFS 2020
navdata-default.sqlite	The default database to use regardless of simulator assuming none of the above files are found.

You need to run NavDataReader 1.0.19.beta or above to create the database as this version has support for automatically finding the FS2020 scenery files. After downloading and installing NavDataReader you simply need to run it from a DOS command box.

The DOS command line to generate a navdata.sqlite file is simple.

       NavDataReader –f MSFS –o navdata-Msfs.sqlite
       NavDataReader –f P3DV2 –o navdata-Prepar3dV2.sqlite
       NavDataReader –f P3DV3 –o navdata-Prepar3dV3.sqlite
       NavDataReader –f P3DV4 –o navdata-Prepar3dV4.sqlite
       NavDataReader –f P3DV5 –o navdata-Prepar3dV5.sqlite
       NavDataReader –f FSX –o navdata-Fsx.sqlite
       NavDataReader –f FSXSE –o navdata-FsxSe.sqlite

Use the appropriate command line for the type of simulator you are using.

Note: I noticed that with my FSX Steam install I had to use the command line:

Navadatereader –f FSX –o navdata-FsxSe.sqlite

For some reason the –f FSXSE switch was not finding the steam install but the –f FSX did.

It takes a while for the tool to create the file so be patient. Once it is complete, copy the file to the root folder of FS-ATC-Chatter.

After you connect to the simulator you can look in the log.txt file to confirm that FS-ATC-Chatter found and is reading the correct navdata file. The example below is a connection to MSFS 2020 and the navdata-Msfs.sqlite database.

2020-11-14 17:42:29.501 -05:00 [INF] Connected to simulator: KittyHawk (11.0.282174.999)
2020-11-14 17:42:29.502 -05:00 [INF] Loading facilities from D:\FS2020_Plugins\C-Sharp\FS-ATC-Chatter\navdata-Msfs.sqlite

You can watch a YouTube tutorial video that demonstrates how to create an updated COM database.

https://www.stickandrudderstudios.com/fs-atc-chatter-tutorials/

Limitations

- Although the default frequency database is fairly accurate it may not match the assigned ATC facility frequencies in the FS2020 / P3D / FSX scenery databases. Please read the section of this user guide that discusses how to use the free open source tool NavDataReader to create an up-to-date navigation database.
- At the moment FS-ATC-Chatter has no way of knowing when the simulator is trying to generate ATC audio. This includes ATC audio from AI traffic. Hopefully we can get Microsoft to open the simulator API more so that FS-ATC-Chatter can automatically pause chatter playback when other ATC audio is active.

Volunteer Program

Creating the content for FS-ATC-Chatter can be a bit time consuming. In order to keep the cost low we are encouraging users to volunteer to help add more high quality clips to the collection.

As a volunteer we will give you a free license to FS-ATC-Chatter after you have submitted 100 high quality clips. There are also additional rewards for existing customers who further contribute to the collection.

If you are interested in being a volunteer review the material at the link below and follow the sign-up instructions.

https://www.stickandrudderstudios.com/x-atc-chatter-project/

Support

Support can be obtained by interacting with us on our Avsim.com forums:

https://www.avsim.com/forums/forum/893-fs-atc-chatter/

You can also obtain support for FS-ATC-Chatter by visiting our support page:

https://www.stickandrudderstudios.com/support/

You can also contact us using the contact form:

https://www.stickandrudderstudios.com/contact-us/