

Advanced Multiplayer Chat System v2.0

By Wizz

Introduction and features:

Advanced Multiplayer Chat System provides everything you would expect from a modern MMO type chat system. This includes: Multiple Channels, Tabs, Settings, Commands, Private Messages, Social System and more! It's easy to implement and customize to suit your needs.

MAIN FEATURES

- 100% BLUEPRINTS - Entirely made in blueprints, no C++ knowledge needed.
- Replicated - Fully functional for dedicated server multiplayer games.
- Channels - Supports multiple channels, each having its own functionality and colors. Currently has 11 channels, more can be added.
- Dynamic Tabs - Supports multiple tabs which can be freely added/removed or edited.
- Tab Settings - Every tab can be customized to suit player preference with its own separate settings. Includes the ability to enable/disable specific channels for that tab.
- Global Settings - Includes several global chat settings.
- Commands - Easy to implement system with several already existing commands.
- Social System - Supports group related content with a variety of channels and commands.

OTHER FEATURES

- Fully Commented
- Allows Scrolling
- Alphanumeric Characters Only
- TimeStamps - Each message contains a timestamp. This can be enabled/disabled.
- AutoScroll - If the player is docked to the bottom of the Chat, they will automatically jump to every latest message. If not, they will not be interrupted by the latest message.
- Current Channel Display - Always know in which channel you are currently in. This includes the name of the person you are privately chatting with as well.
- Command Errors Resolver - Notify the player of improper command use.
- Say/Emote Messages displayed above the sender's character in a radius around them. This can be enabled/disabled.
- Press "Enter" to start typing a message. Press "/" to start typing a command.
- Zone Notifications - Notify the player of entering a new zone.
- Combat Log - Notify the player of any damage dealt close to them.

List of Channels:

- /say (/s) - Channel for players close to each other.

- /emote (/e) - Channel for players close to each other.
- /yell - Channel for players close to each other within a wide radius.
- /global - Channel shared with all connected players.
- /zone (/z) - Channel for players in the same zone.
- /guild (/g) - Channel for players in the same guild.
- /party (/p) - Channel for players in the same party.
- /ann - Channel for announcements. Only Admins can use this chat.
- /private (/pm, /w, /whisper, /r) - Channel for private messages between players. Reply (/r) can only be used when someone has already messaged you.
- Game - Channel for game feedback. Players can receive messages through this channel, but can't send any.
- CombatLog - Channel that stores combat logs near the player. Players can receive messages through this channel, but can't send any.

Each channel has its own colors.

New channels can be added/removed.

-Tabs-

Players can freely add or remove tabs.

Global Chat Settings:

- Auto Hide Background - Widget background can be hidden when it's not in use, but the messages still remain.
- Text Font Size - Changes the font size for all messages.
- Show Timestamps - Can be turned on/off.
- Show Messages Above Characters - Can be turned on/off.

Tab Settings:

- Specific Channels can be enabled/disabled - Each tab can be customized to only display messages from enabled channels.
- Rename Tab - Renames the tab.
- Remove Tab - Removes the tab from the tabs bar.

List of Commands:

- /help - Lists all commands.
- /create (Party/Guild) (Guild Name)
- /invite (Player Name) - Invite a player to your Party if you are the leader.
- /ginvite (Player Name) - Invite a player to your Guild if you are the leader.
- /kick (Player Name) - Kick a player from your Party if you are the leader.
- /gkick (Player Name) - Kick a player from your Guild if you are the leader.
- /leave (party/guild) - Leave the group. If you are the leader, a random player from the group will become the new leader. If no other player is found, the group will be disbanded.
- /passlead (Player Name) - Pass the party leader role to another member.
- /gpasslead (Player Name) - Pass the guild leader role to another member.

- /channels - Display a list of channels.
- /emotes - Display a list of default emotes.

List of Emotes:

- /smile
- /laugh
- /cry

Version 2.0

UI Overhaul

Design and color change

Tab Settings now appear when right clicking over a tab

Global Settings and New Tab buttons changed

Hide Background Improvements

Access all previously sent messages by using Up and Down arrows when typing in chat.

More feedback messages have been added for when the player uses a command

Bug fixes:

Expanded allowed characters array

TimeStamps are now local for everyone

Scroll Offset fixed when reading through past messages, doesn't move anymore

Clicking outside of chatbox now clears the user focus from the message

When the leader leaves a guild/party, they no longer get a message that the guild is disbanded if another member became a leader

Using a command that requires a name no longer repeats the last message when said name is not written

Wrap scale for the message adjusted so that it can no longer go behind scrollbar

Text Input Widget no longer commits text when clicking outside of the widget

Blueprints

All AMCS relevant blueprints are stored in the AMCS Folder located under the Content folder.

Adding a new channel

Simply add another channel in the '**E_ChatSystemChannels**' enumerator.

To add functionality for the new channel, open the AMCS_PlayerController and find the '**Server Receive Message**' event, and from the switch node there will be an option to execute code for

your new channel. In general, this is the place to execute all code that decides who gets which message.

If you want the players to be able to write messages in this new channel, you will also have to add some logic to the ChatBox Widget.

Open the **'Check For Channel Swaps'** function and add logic for swapping to that specific channel. Make sure to add code in the **'Set Text Color'** function as well. This will be the color for that channel.

Removing a channel

In case you want to remove a certain channel, simply delete all code in relation to that specific channel. My advice is to leave **'E_ChatSystemChannels'** for last and first go through all AMCS blueprints and remove code manually. Once everything is removed, you can safely remove it from the enumerator.

Adding Commands

All commands are stored in the **'Parse Message Commands'** in ChatBox Widget. To add a new command, simply add another branch and check for the command using the **'Message Has Command'** function.

Notice: If you want the command to use a variable (eg. Player Name), after the command name, make sure to add a whitespace after the command name so that the substring checks will execute properly. An example of this would be a /kill (player name) command, make sure to input the first check as '/kill ' instead of '/kill'.

Key Binds

Tab - Enable/Disable cursor

N - Change name to 'Nick' (For testing purposes)

J - Change name to 'James' (For testing purposes)

P - Change name to 'Prince' (For testing purposes)

FAQ

Testing - Go to Project Settings>Maps & Modes>Change Default GameMode to ThirdPersonGameMode (The AMCS one), toggle Dedicated Server before starting the level and set player count to 2 or more.

Adding AMCS to your project - Create a new project with AMCS and migrate AMCS Folder to the Content folder of your project (make sure to migrate directly to 'Content' folder and not any other folder or else it won't work). Take your Controller, Character and GameMode blueprints, go to Class Settings in each of them and set 'Parent Class' to it's AMCS counterpart. Then add a "Parent: BeginPlay" node after each of BeginPlay events in the blueprints you are using so that the BeginPlay logic of AMCS blueprints is executed, do the same for Event Tick and Parent: Event Tick. From here on, you should be good to go. This can take from 5 to 20 minutes based on how you want to implement AMCS in your project.

Allowed Number of Chat Windows - Change this variable to allow players to have more than 5 windows open at the same time.

Notice: Having too many open tabs can break the tab names so don't go crazy beyond the limit.

Adding allowed characters - To add new usable characters find the '**Check If Message Has Only Allowed Characters**' function inside ChatBox Widget and simply add wanted characters to the 'Allowed Characters' local array. Same goes for the '**Check If Text Only Has Allowed Characters**' function inside TextInputWidget.

When testing in Unreal Editor with multiple clients, sending a message from clients other than Client 1 will switch back to Client 1 automatically. This is an UE4 issue caused by the '**Set Focus to Game Viewport**' node. To fix this, just click with your mouse on the client you want to use. It will work fine once the game is packed and outside of Unreal Editor.

Sometimes names won't instantly appear above characters, and to fix this there is a '**Set Timer By Function Name**' node connected to the '**Event Being Play**' in ThirdPersonCharacter Blueprint. If this happens regularly, increase the time to a higher value.

Updates - Yes, I plan to update the asset with more functionality.

If you have any questions, feel free to contact me at any time at unovakovic97@gmail.com. You can also reach out to me on discord at wizz.