Chatting With KetuFile

KetuChat

KetuChat User Manual

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1.0 Introduction To Chatting With KetuFile - *KetuChat*

KetuFile has been able to be used for chatting since it's earliest inception, circa 2002. KetuChat is simply the offering of this innate capability, as a service, rather than the purchasing of an application program license.

IT professionals have been able to set KetuFile up for a chat environment, since the introduction of KetuFile circa 2002. This chat is an inherrent capability of KetuFile.

The introduction today, of KetuChat is an economic initaive. <u>Prior</u> to the availability of KetuChat, a corporation/government agency/educational organization, might have had to purchase hundreds or even thousands of KetuFile licenses. In the cases where some or even many, of their employees are infrequent users of encrypted chatting, then it is very costly to give them encryption ability, and represents an inefficient use of IT funds.

Since KetuChat is a <u>service</u>, this allows a corporation/government agency/ educational organization, to purchase a single account for KetuChat that only "costs" the organization as the Users (employees of the organization) actually use it. In addition, a single acount can be shared by all employees. Now the organization can give the capability for encrypted chat to all employees without the need to purchase many costly KetuFile application licenses.

You Must Understand This Section – Please

Key

For KetuFile/KetuChat, the **Key** is a series of numbers and letters. The letters can be upper case or lower case. The upper case and lower case version of any letter is considered to be completely different symbols. So:
lower case: a
and
upper case: A
are compeltely different.

It is crucial that the **Key** be random in nature. It MUST NOT be any word, name, phrase, known sequence of numbers, that can be found in any document on Earth. It MUST NOT be repetitious. It MUST NOT be any sort of personal data.

IT MUST BE RANDOM.

Key Length

KetuFile/KetuChat offers 512 bit encryption. This means the length of the **Key** is 512 bits.
This is approximately 64 characters.

Therefore when using KetuFile/KetuChat, always employ a 64 character <u>random</u> **Key**.

Symmetric Encryption

Symmetric Encryption means that the <u>same</u> **Key** is used for encryption and decryption. Therefore when someone encrypts a message/text/file, using Symmetric Encryption, then that person HAS TO get the **Key**, that was used for encryption, to the party who is to receive the encrypted message. That is the only way that the receiving party can decrypt the message/text/file.

By definition, the **Key** CANNOT be included within the encrypted message/text/file.

The person sending the encrypted message/text/file HAS TO find a way to get the **Key**, to the receiving party, by a secure means. Often this will be, ordinary postal mail.

IMPORTANT NOTE: In case you are wondering, how you are able to make "secure" purchases in shopping carts throughout the Internet, and never be concerned with passing a **Key**, be advised that these shopping cart transactions are NOT secure. The security that is presented, is a fraud, because weak-sister Public Key Private Key (PKPK) encryption is used. PKPK is a un-symmetric encryption approach.

NOTE: PKPK does not have to be a weak-sister encryption, if a long enough **Key** is used, for example a 16,000 bit **Key**.

NOTE: The National Institute of Standards and Technology states that to have the equivilant encryption strength as provided by AES (as in KetuFile/KetuChat), with a 256 bit **Key** Length, it is necessary for PKPK to have a 16,000 bit **Key** Length !!!

Using KetuChat

General

In the following paragraphs and images, there are descriptions to walk-you-through using KetuChat. There is a KetuChat Windows(tm) application program that allows you to type, encrypt, and send text messages to another KetuChat User. In addition, you can receive messages from another User.

KetuChat works as a one-to-one chat service. One person can chat, only with one other person, at a time.

Registration With KetuChat Server

Before you can use the KetuChat Windows(tm) application program for chatting, you need to have an Account (Account Number and UserName) on the KetuChat Server, and you need to have Units in your Account.

Setting up an Account and adding Units to your Account is done at the KetuChat website:
http://ketuchat.com

Installing KetuChat

KetuChat does not install as a typical Windows(tm) application program. It is a much simpler installation. This is done to facilitate putting KetuChat on a memory stick.

There is considerable advantage to you to have your KetuChat Windows(tm) application program and you Ketuchat Address Book all together on a memory stick. This is an excellent approach to security. Take the memory stick with you whenever you leave your computer.

KetuChat.xxxxxx.exe

The KetuChat Windows(tm) executable program has the Version number built into the file name. For example, Version 14 would be:

KetuChat.000014.exe

There is always 6 digits for the Version number.

Ketuchat.zip

Ketuchat can be downloaded from ketuchat.com website as a Zip file. This zip file can be placed in a folder (directory) on your memory stick, or on your computers Hard Drive (such as the C: drive).

When you unzip the KetuChat.zip Zip file, it will create a folder, whose name is: KetuChat
Then it will place 3 items on your drive (either your memory stick or your hard drive). Those 3 items will be within the KetuChat folder.

The 3 items are:

1] a Command file: **Run_KetuChat.cmd**
2] a folder (directory): **bin**
3] an executable file, within the newly created bin folder: **KetuChat.xxxxxx.exe**

Any time you run the KetuChat program, use the Command file (aka Batch file). This Command file will load and run the actual KetuChat executable program that is sitting in the folder named: bin

No need to worry if you have the latest version of KetuChat. When you launch the program, you can go to the Settings Dialog (Click the Settings Button) and check-for updates and download an appropriate update.

Where – Exactly – To Install KetuChat

If you choose to install KetuChat on a memory stick, that memory stick will have a drive letter. When you install a memory stick into the USB port on your computer, the operating system will detect the memory stick and assign a drive letter to it.

The drive letter will be the first letter available. For example, the drive letter assigned might be: E: or F: or G: etc.

Memory Stick Example

For the sake of an example, assume that after you installed the memory stick, your operating system assigned it to have the drive designation: E:

- So using your usual Windows file explorer, click to be on the E: drive.
- Download the KetuChat Zip file to this drive (the E: drive).
- Extract the Zip file in this E: drive
- Now you will have a folder in the E: drive that is: **KetuChat**
- When you navigate into the KetuChat folder, you will see:
- **Run_KetuChat.cmd** and **bin** folder
- If you navigate into the bin folder you will see a KetuChat executable file. As an example, if that file is Version 14, you will see: **KetuChat.000014.exe**
- Again, for this example, if you care to peek into the Run_KetuChat.cmd Command file, you will see that it runs: KetuChat.000014.exe

Hard Drive Example

- So using your usual Windows file explorer, click to be on the C: drive.
- Download the KetuChat Zip file to this drive.
- Extract the Zip file in this C: drive
- Now you will have a folder in the C: drive that is: **KetuChat**
- When you navigate into the KetuChat folder, you will see:
- **Run_KetuChat.cmd** and **bin** folder
- If you navigate into the bin folder you will see a KetuChat executable file. As an example, if that file is Version 14, you will see: **KetuChat.000014.exe**
- Again, for this example, if you care to peek into the Run_KetuChat.cmd Command file, you will see that it runs: KetuChat.000014.exe

An Ideal Way To Install KetuChat

An ideal way to use KetuChat is to place it on a memory-stick, aka USB flash drive. Place the KetuChat.zip Zip file in any place in the usual folder (directory) heirarchy.

The reason that this is the ideal way to install Ketuchat is that when you are finished using your computer for the time being, just remove the memory stick and put it in your pocket or purse. Now there is no sensitive data left on your computer.

When you use KetuChat you will have a Key for every User that you chat with. Those Keys are in your Address Book and you do not want anyone to have access to that information (UserNames and their respective Keys). So taking the Memory stick, that has your Address Book including Keys, with you, is a very good approach to security.

When KetuChat Is Run For The First Time

When KetuChat is run for the first time, KetuChat will create certain needed sub-folders (sub-directories).

Step-By-Step Using KetuChat

KetuChat Program		Sign-On Dialog				
Chat	Address Book	Settings	Quit KetuChat	Ver 7		

STATUS BOX :   Step 8 Complete Get-Server-Lists

KetuChat Program		Sign-On Dialog				
Chat	Address Book	Settings	Quit KetuChat	Ver 7		

Current Version of KetuChat. NOTE: odd number = Beta even number = Release

This is usually the first Button to select.

These 4 Buttons are present on all Ketuchat Dialog Screens.

Preferred method to quit Ketuchat, because this will log-off Ketuchat Server.
Alternate way to quit Ketuchat.

Status Box area that changes as the program execution progresses.

STATUS BOX :   Step 8 Complete Get-Server-Lists

KetuChat Program — Settings

Settings

Ver 17

[Chat] [Address Book] [Settings] [Quit KetuChat]

This button was clicked to reach this Dialog

When you registered for an account on the
KetuChat Server, you were assigned:
UserName
Password
Account Number
Go ahead and enter your account data here.

My UserName: `ron`

My PW `f9ut45bng`

My Acct Num: `de9-45f-ram-81s`

Click this Button to check for
KetuChat updates.

[Check For Updates]

If there are updates available,
Click this Button to download and
install update. Please be patient
while this happens.

[Apply Updates]

☑ Use Server 1: ketufile.com
☐ Use Server 2: ketufile.com
☐ Use Server 3: ketufile.com

[Save All Settings On This Page]

*After entering or changing data on this
Dialog, click this Button to save your data.*

Select Server 1, unless otherwise directed by KetuChat Support.
Select Server 1 even if the Domain on your Dialog is different from
this Help image.
You may only use a Server where your account has been
specifically set up by KetuChat Support.

STATUS BOX :   Step 8 Complete Get-Server-Lists

KetuChat Program — Entering A New User Into Address Book

Entering A New User Into Address Book

Ver 7

[Chat] [Address Book] [Settings] [Quit KetuChat]

*This Button Was
Clicked To Reach This
Dialog*

Here Is Where You Add A NEW User Into Your Address Book
OR It Is Where You Designate a User That You Want To Chat With

**1. Enter the KetuChat
UserName of the person to
be added to your Address
Book**

Type or Paste-In The UserName (Handle):

Type or Paste-In The Encryption Key For This User:

**2a. Enter the Encryption
Key to be used in your
chatting with this specific
UserName**

[Generate 512 bit Random Key]   [Save Above User To My Address Book]

[I Want To Chat With Above User]

**2b. As an alternative, you
can generate a random Key
by clicking this Button. It will
take a few minutes. Watch
the progress on the bottom
of this KetuChat Dialog**

**3. Once the UserName
and Key are in the text
boxes above, click this
Button to save that info
into your Address Book**

===================================

Below Is The Contents of Your Address Book

Scroll Through The Entries On The Right.
If You Double Click On Any One Entry,
It Will Be Loaded Into The Text Boxes Above.

**4. Once you complete Step 3, the
UserName will show up here in the
Address Book listing.**

STATUS BOX :   Step 8 Complete Get-Server-Lists

KetuChat Program

| Chat | Address Book | Settings | Quit KetuChat | Ver 7 |

2. Initially these 2 text boxes will be blank. After you Double-Click in Step 1, the UserName and Key will be loaded here

This Button Was Clicked To Reach This Dialog

Here Is Where You Add A NEW User Into Your Address Book OR It Is Where You Designate a User That You Want To Chat With

Type or Paste-In The UserName (Handle):   alice

Type or Paste-In The Encryption Key For This User: 1234

3. Finally, Click this Button, once, to designate that this is the User you want to chat with.

| Generate 512 bit Random Key | Save Above User To My Address Book |

| I Want To Chat With Above User |

===============================:

1. Scroll through your Address Book and Double-Click on the UserName who you want to chat with.

Below Is The Contents of Your Address Book

Scroll Through The Entries On The Right.
If You Double Click On Any One Entry,
It Will Be Loaded Into The Text Boxes Above.

```
7girls,abc123
alice,1234
andrew,sdjcvnwodnuh545ad56adadgjhqwyiuqwnasfakeajsh
bev,vnvn
bill,1E6ZB4Ah9uocPdxJVUXCRFHIfgmvY8iMwnSsjNL70D3za2tpO5TekrKlbyQV
cathy33,abc123
```

STATUS BOX :   Success writing New User To Existing AddrBk.

KetuChat Program

| Chat | Address Book | Settings | Quit KetuChat | Ver 7 | Balance |

☐ I AM Online   **Button Clicked To Reach This Dialog** | Check Online Status | | Clear This Chat User |

| Chat UserName Not Set | | Not Online | | Chat UserKey Not Set |

1. This CheckBox is used to Register yourself with the Server - this means: Going OnLine. Click the CheckBox to put yourself Online now.

Edit

| <- Clear Text |

2. Depending on what you were last doing with KetuChat, the STATUS BOX will have various messages. After you Click the aforementioned CheckBox, the STATUS BOX will confirm that you are OnLine and give your Account Balance.

Type Your Chat Text Below, Then CLICK Send Button

Edit

STATUS BOX :   Step 8 Complete Get-Server-Lists   --- | Send |

KetuChat Program

| Chat | Address Book | Settings | Quit KetuChat | Ver 7 | Bal: 494 |

☑ I AM Online

Button Clicked To Reach This Dialog   Check Online Status   Clear This Chat User

1. You have selected to go OnLine

Chat UserName Not Set   Not Online   Chat UserKey Not Set

Edit

<- Clear Text

2. Registering is complete. You are now OnLine. Other Users who want to chat with you can see that you are Online. Your Account Balance is shown.

Type Your Chat Text Below, Then CLICK Send Button

Edit

STATUS BOX :   Step 8 Complete Registering Success Registering, Balance=494.   ---   Send

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KetuChat Program

| Chat | Address Book | Settings | Quit KetuChat | Ver 7 |

Your Account Balance   Bal: 494

☑ I AM Online

Button Clicked To Reach This Dialog   Check Online Status   Clear This Chat User

UserName that you are chatting with

alice   NOT Online_   1234   Key of User you are chatting with

Edit

Notice that at this moment, the User you want to chat with in NOT Online.
Also, look at the end of the words:
Not Online
Notice that every 5 seconds or so, an Underscore character appears or vanishes. This is a heartbeat that indicates the Online status is being checked again.

<- Clear Text

Type Your Chat Text Below, Then CLICK Send Button

Edit

STATUS BOX :   Step 8 Complete Retrieving Chat Text NO chat text from: alice   ---   Send

Chatting 2

KetuChat Program   Ver 7   Bal: 494

Chat | Address Book | Settings | Quit KetuChat

☑ I AM Online

Button Clicked To Reach This Dialog

Check Online Status | Clear This Chat User

alice | ON Line Available_ | 1234

Your Account Balance

Status now shows the User you want to chat with, is OnLine.
IMPORTANT: Being able to chat with a User means that he/she has placed themselves OnLine, ON THE SAME SERVER, that you are registered on.

Click this Button to force immediate check if User is OnLine

Click this Button to clear the present User as your chat choice

<- Clear Text

Type Your Chat Text Below, Then CLICK Send Button

STATUS BOX :   Step 8 Complete Retrieving Chat Text NO chat text from: alice

Send

Chatting 3

KetuChat Program   Ver 7   Bal: 494

Chat | Address Book | Settings | Quit KetuChat

☑ I AM Online

Button Clicked To Reach This Dialog

Check Online Status | Clear This Chat User

alice | ON Line Available | 1234

<- Clear Text

1. Type some text in your input text box.

2. Then Click the Send Button.

Type Your Chat Text Below, Then CLICK Send Button

Hello Alice

STATUS BOX :   Step 8 Complete Check Online Status of User ON Line Available

Send

KetuChat Program — Chatting 4

Chatting 4

| Chat | Address Book | Settings | Quit KetuChat | Ver 7 | Bal: 490 |

☑ I AM Online

Button Clicked To Reach This Dialog   Check Online Status   Clear This Chat User

alice   ON Line Available   1234

2. And appears up here, labeled as text FROM you.

```
=== ME ===
Hello Alice
```

<- Clear Text

1. The text vanishes from here.

Type Your Chat Text Below, Then CLICK Send Button

STATUS BOX :   Step 8 Complete Retrieving Chat Text NO chat text from: alice   ---   Send

---

KetuChat Program — Chatting 5

Chatting 5

| Chat | Address Book | Settings | Quit KetuChat | Ver 7 | Bal: 490 |

☑ I AM Online

Button Clicked To Reach This Dialog   Check Online Status   Clear This Chat User

alice   ON Line Available   1234

When the other User (Alice) responds, their text is below yours, and identified by their UserName

```
=== ME ===
Hello Alice
=== alice ===
Hey, Hi There Rob
```

<- Clear Text

Type Your Chat Text Below, Then CLICK Send Button

STATUS BOX :   Step 8 Complete Retrieving Chat Text NO chat text from: alice   Send