



Khan Academy on a Stick (or The Khan Academy in your pocket)

What is Khan Academy?

Khan Academy (<http://www.khanacademy.org/>) is a world-class and award-winning online library created by Salman Khan, which contains hundreds of high quality video lectures available for free to any Internet user.

What is Khan Academy on a Stick?

- It is a **compact and streamlined version of Khan Academy that does not require an Internet connection.**
- It contains Math and Science lectures from khanacademy.org, as available in khanacademy.org on October 2010.
It includes the following Khan Academy sections:
 - Arithmetic
 - Pre-algebra
 - Algebra
 - Algebra 1 Worked Examples
 - California Standards Test Algebra I
 - California Standards Test Algebra II
 - ck12.org Algebra 1 Book Examples (plus book)
 - Precalculus
 - Calculus
 - Probability
 - Statistics
 - Geometry
 - California Standards Test Geometry
 - Trigonometry
 - Differential Equations
 - Linear Algebra
 - Developmental Math
 - Biology
 - Chemistry
 - Organic Chemistry
 - Physics
- This distribution can fit into a small and very portable Flash memory stick. In can of course also be placed in portable external drives or any other storage media with enough capacity.
- The Khan Academy video library can be played easily anywhere, by just plugging it to any computer, without installing anything on the PC nor requiring an Internet connection.
- It enables schools, community centers and individuals around the world with no Internet connectivity to benefit from viewing offline these exceptional educational videos

Why would people need Khan Academy on a Stick?

- The Khan Academy web site videos are hosted online in YouTube, and are available for free to anyone, anywhere; as long as you have an active Internet connection.
- Unfortunately in the world there are still large number of regions and communities with no Internet access at all, or in many other cases if they have Internet connectivity the

available bandwidth is unusable for most practical purposes, much less to download videos.

- Or Internet connectivity is too expensive.
- Or a school or community has good Internet connectivity but for some reason access to YouTube is blocked.

Who did and maintains Khan Academy on a Stick? And other details

- This offline version was created by norberto@mujica.org, to help and support educational needs where there is no Internet access. It is being used in many places around the world.
- The content is a subset of the one available in khanacademy.org. This latest version includes very comprehensive Math and Science video playlists as they were available online on early October 2010.
- There is no promised, scheduled nor planned periodic maintenance or upgrades, though I hope to come back periodically, time permitting, to update content.
- There are details on how to get this Khan Academy on a Stick at <http://mujica.org/khan/>
- Some tech details: built with Perl and Mysql, on a Linux box. Content tested on Windows, Mac and Linux desktops, with different flash drives and external storage devices. Pages template from Simple Yello, a free template created by [uniQue](#) and released by [Themebot](#) under the [Creative Commons Attribution 3.0](#) license.

Is this offline compendium of Khan Academy content under any license?

Yes. The [Khan Academy on a Stick](#) distribution is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License](#).

Based on the great work at khanacademy.org. You can use this offline version except for any commercial purpose, like selling it in any way. You can only distribute it for free, and you must keep the attribution and the "About" section ([about.html](#)).



How can I get and use “Khan Academy on a Stick”?

This quick guide describes how to get and use this self-contained offline version of the Khan Academy videos, to be installed on a flash drive and displayed on a personal computer. The example below follows steps using WinZip, a very popular and free compression tool on Windows.

1. Download the videos package:

All the available videos are packaged and compressed in just one file to download. It comes in 2 versions. One compressed in the tar.gz format (`khansite.tar.gz`) and another in the Zip format (`khansite.zip`).

If you use a Windows PC it is recommended to download the `.zip` file (`khansite.zip`).

The file can be downloaded and saved to a computer and then be expanded to its original files structure, on the PC hard disk or directly to a flash memory drive, from where it can then be distributed to other PCs.

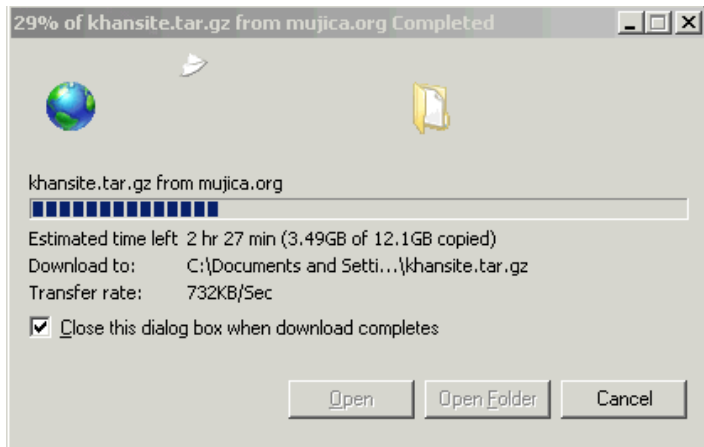
The content is packaged and compressed, and can be unpacked by tools available on any platform (like WinZip on Windows).

You can download the `khansite.tar.gz` or `khansite.zip` file from:

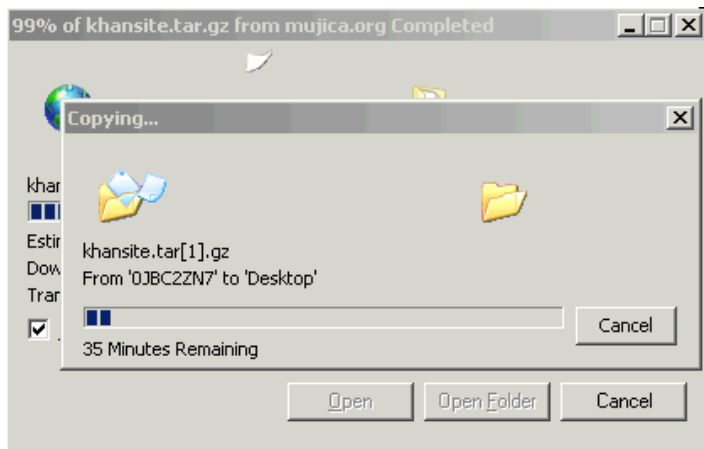
By HTTP: <http://mujica.org/khan/khansite.tar.gz> or <http://mujica.org/khan/khansite.zip>

By FTP: Host = ftp.mujica.org , Username = anonymous@mujica.org, port = 21 (default).

This is a very large file, about 16 GB in this version, which may take a long time to download:



Once the download is completed the temporary file is copied to its destination (like the Desktop), which will also take a while:

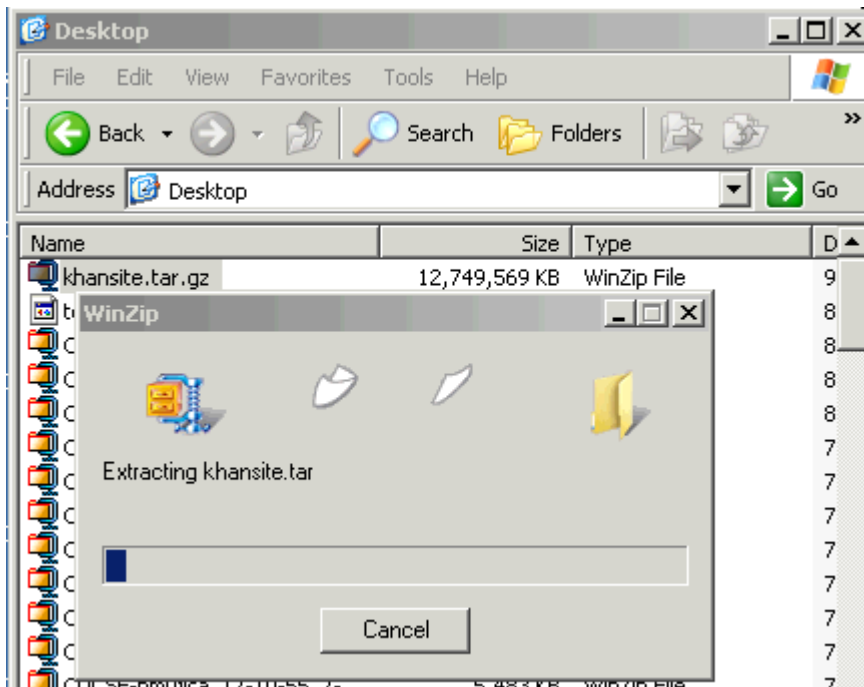
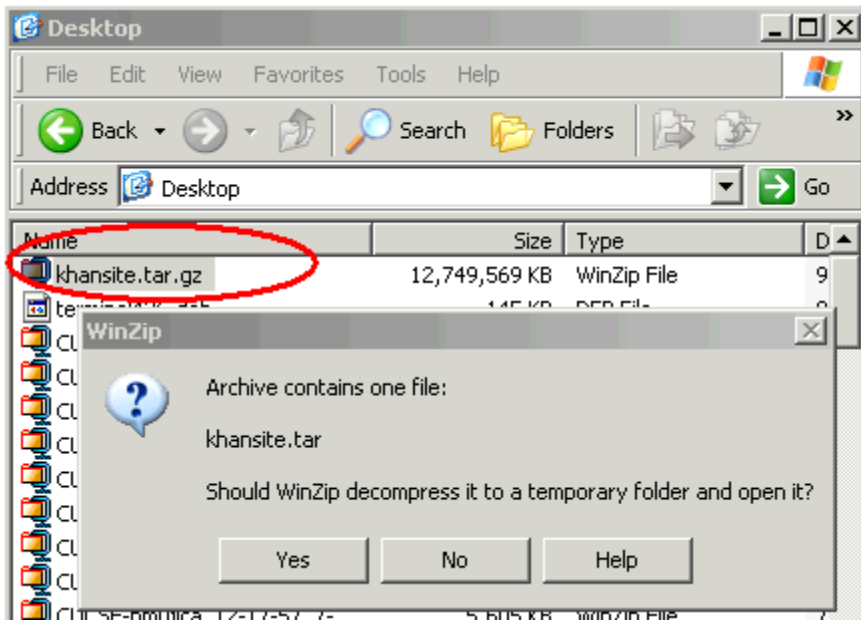


If you want to verify the integrity of this very large downloaded file, to make sure that the transferred file has arrived intact during the download process, this is its md5 checksum:
For the khansite.tar.gz file: 1f00c6156b5a4ced28a6fe5597fdf152
For the khansite.zip file: 3b3674ef3fc2237e887cb3b9deffd222

2. Expand and install:

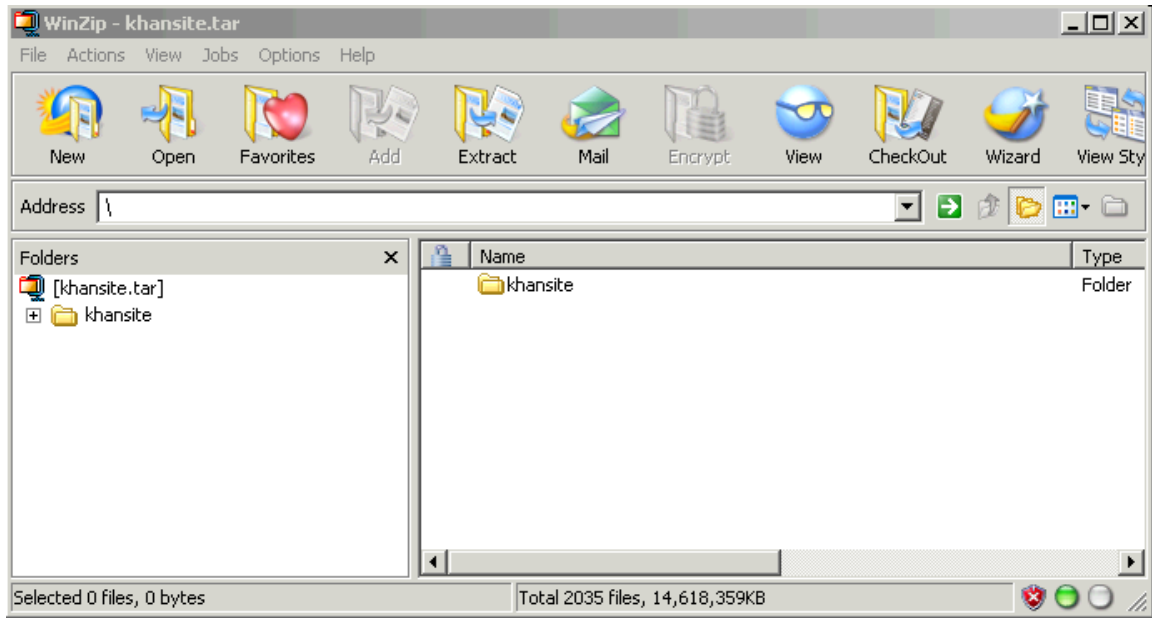
After downloading the khan.tar.gz file or khansite.zip to a Windows PC, double click on it to expand it, which should launch WinZip.

Click 'Yes' on the WinZip window to decompress it and open it:



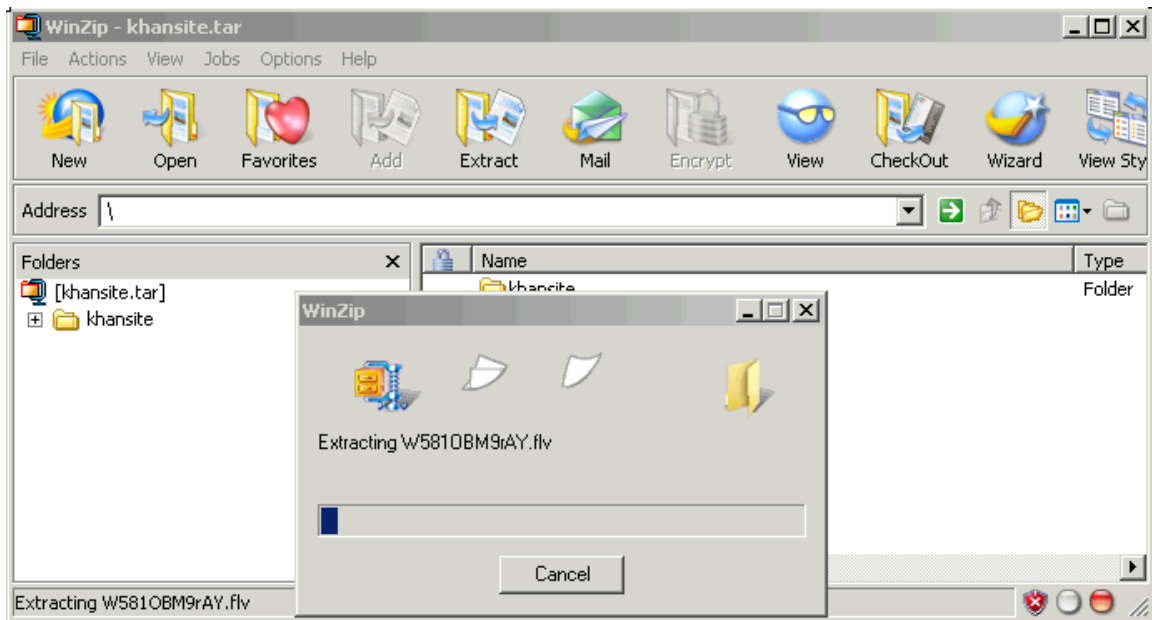
As it is a very large file this step may take a long time, like 3 hours or more.

When the above step completes WinZip will launch:

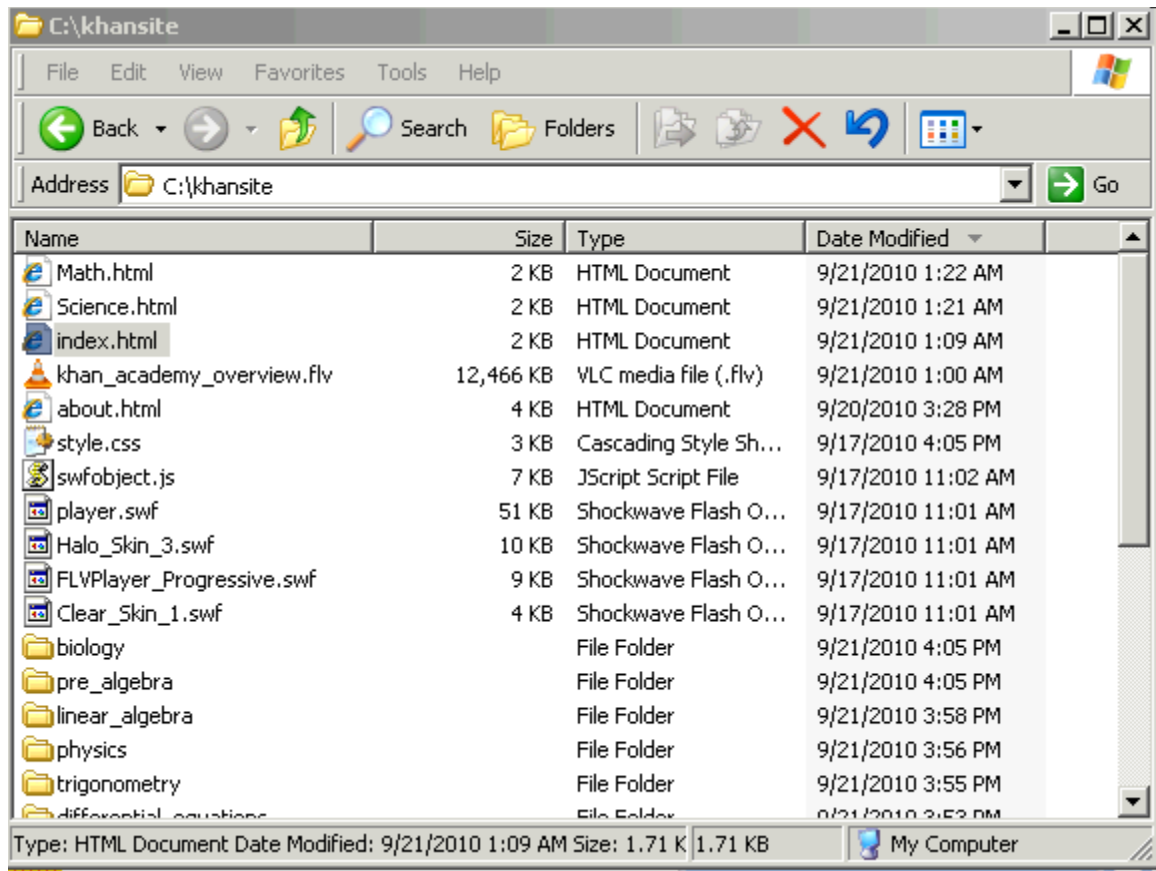


Click "Extract" on the WinZip window.

Select a location in the PC for the Khan Academy files, like the C:\ drive on a Windows PC. Then the WinZip extraction process will start. **This will take time also**, as there are a large number of files:



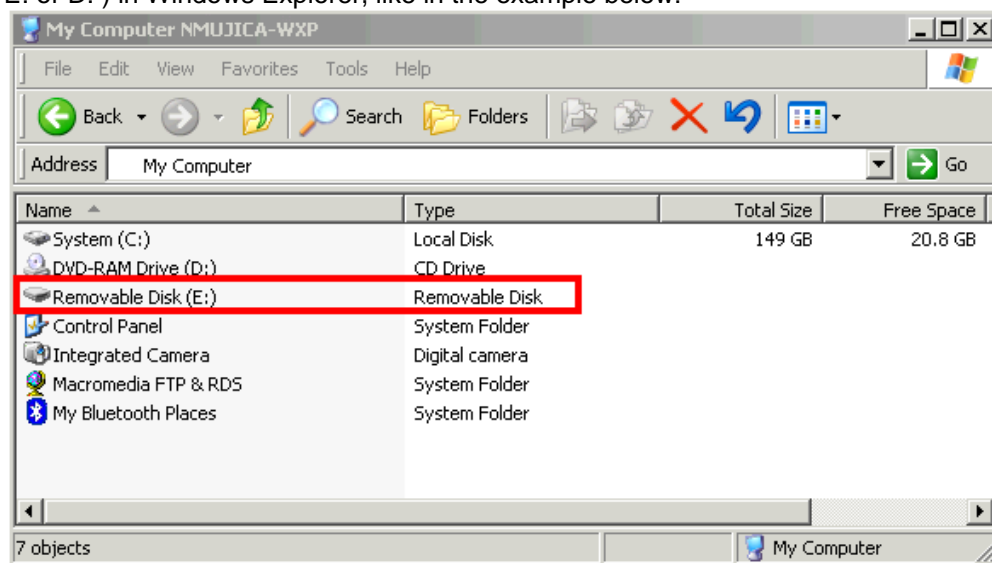
When the WinZip extraction process is completed it launches a Windows Explorer window with the newly created "khansite" directory open, displaying its contents:



Now you'll have in your PC a directory or folder with a Khan Academy video library ready to be used.

3. Make the "Khan Academy on a Stick"

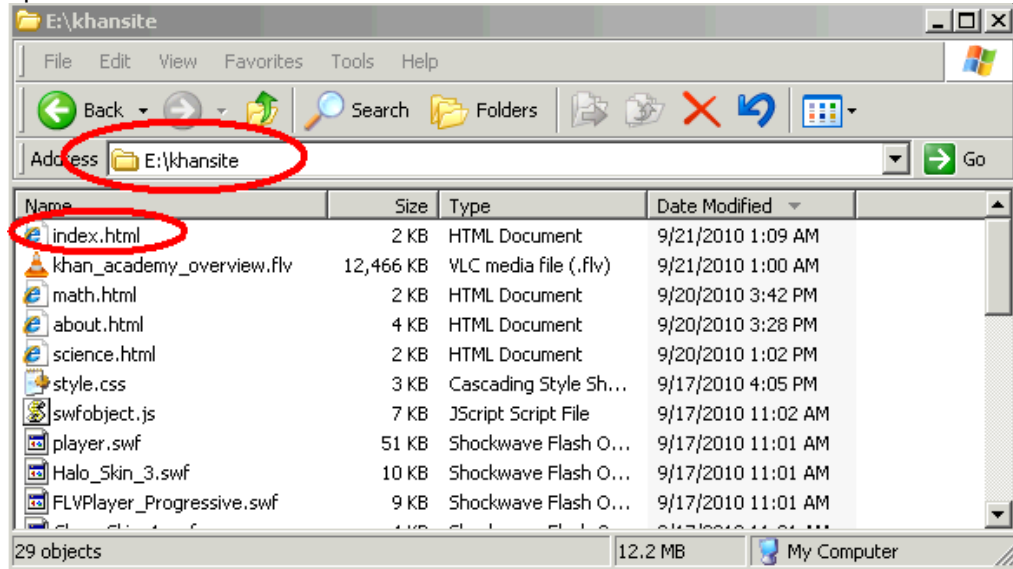
- Plug a flash memory drive (stick), or other external storage device, with enough capacity, into a USB port in your computer. In Windows this will show up as a new drive letter (like E: or D:) in Windows Explorer, like in the example below:



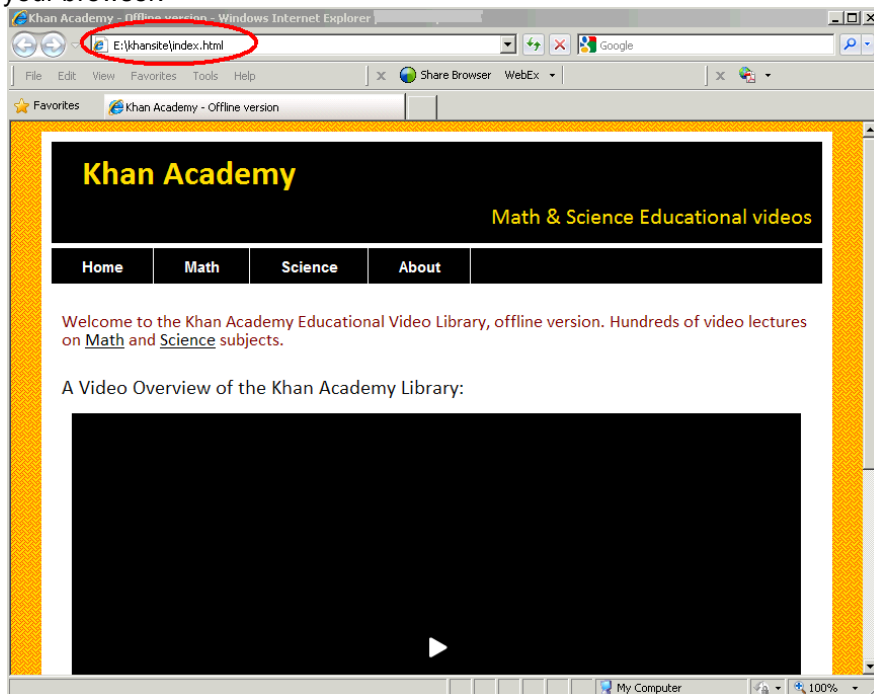
- Using Windows Explorer, drag the new khan folder created by WinZip from your C: drive to the thumb drive, like E: in the example above. This will make a copy of the folder containing all Khan Academy content on the stick, that you can use to take or ship anywhere.

4. View and Play the Khan Academy content

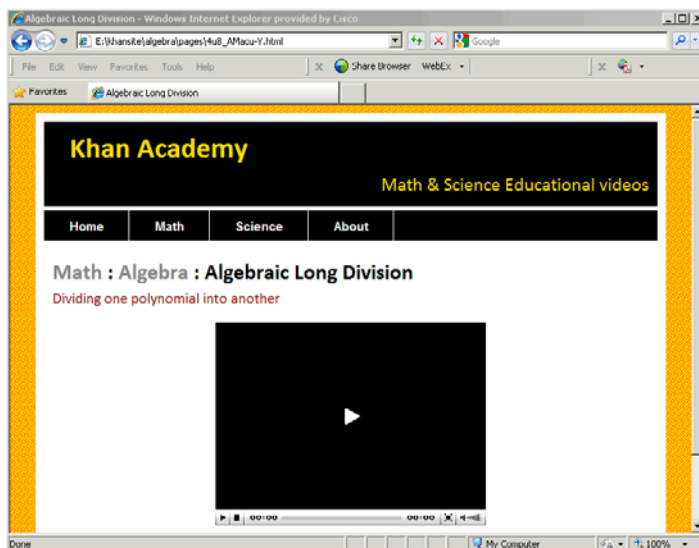
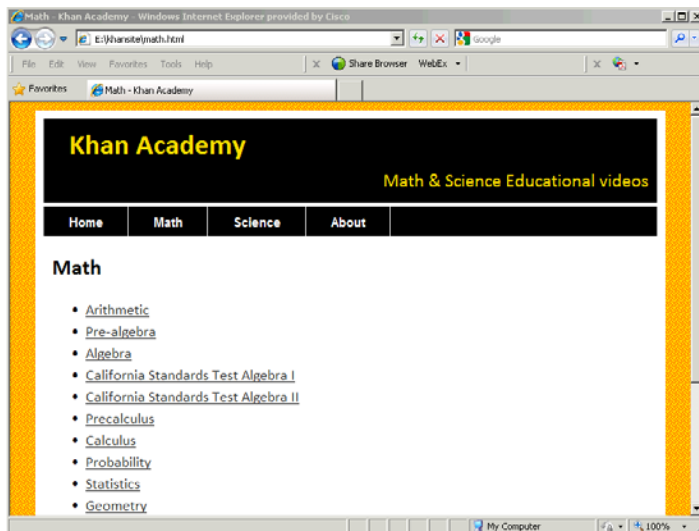
- Plug the “Khan Academy on a Stick” drive into a USB port of any personal computer.
- Navigate to the drive with Windows Explorer to the new mounted drive, like E: in the example.
- Open the ‘khansite’ folder.



- Double-clicking on the index.html file will open the Khan Academy videos main page in your browser:



- You can then browse the rich Khan Academy content from there just following the links, like you would do with any website:



5. Other Options

Of course you can also copy the Khan Academy content from the memory stick to other PCs, assuming there is enough hard disk space on the PC (about 16 GB). This is a common scenario where you can use the small flash memory stick to install the Khan videos in multiple PCs, for instance in a classroom, a school computer lab or PCs in a community center. Make sure these PCs have speakers, to hear the lectures..

Alternatively you can copy the content into the documents root of a web server, so it can be accessed from multiple connected computers in a local network.

6. Final Notes

This offline distribution includes content available on Khan Academy by early October 2010. Fortunately for people around the world Khan Academy is growing and improving at an incredible pace, so you will find newer topics and content added all the time online in the khanacademy.org site. I hope to have some time in the near future to create newer versions incorporating the latest content.

The simple guide uses a Windows computer for the examples, but you get the same exact functionality on any PC (Personal Computer), like a Mac or Linux.

Download this guide as a PDF document: http://mujica.org/khan/stick_guide.pdf

By norberto@mujica.org