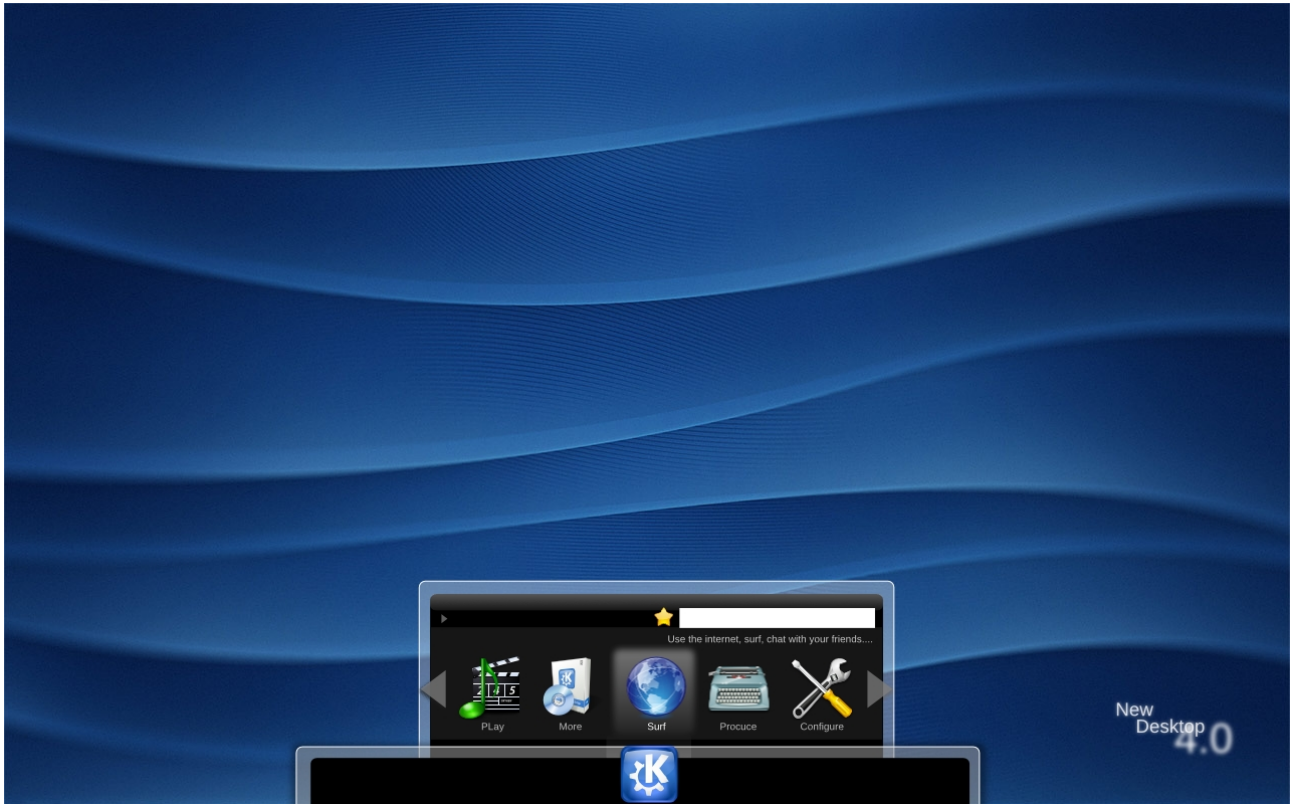# *Raptor*

Next generation application menu for KDE.

Raptor aims to be a a new answer for an old desktop question, how to launch the applications? And tries to tackle in a coherent way the 2 main way's of answering it.

Traditional answer, the menu!
> There is a structured menu in were you kind find all the applications available in your desktop.

> Its main advantages.
>> All applications are available and mostly easy to get..
>> Its a good way to present the application to some one that doesn't know which application does what.
> Main disadvantages.
>> Looks a bit cluttered.
>> The application icon is very small and hard to recognize
>> Takes some time to find your application.
>> Does not offer a very good categorization of the most used apps.

The console way,
> There is some sort of text based UI that shows you several apps based on your text entry

> Its main advantages.
>> Very fast.
>> Very fast.
> Main disadvantages.
>> You have to know what you are looking for.

The answer?
Raptor! Combing the strengths of each of the previous answers and improving the way it interacts with its user...

But how does it do that?
Well by introducing many new features into the menu way of working.
1. Usage database.
2. One panel only.
3. New user action structured menu.

4. Automatic find tool.
5. Favorites easily accessible.
6. Application description.
7. Highly user configurable.

1. USAGE DATABASE.

What is it?
Quite simply a simple database that stores your application usage by counting hits, by doing so one can for any given group of apps sort the ones the have X% of hits of the global number of hits of that group.
Them raptor can display those apps in the raptor first page according to they weight inside the X% percentage. And according to the max number of apps displayable in raptor.

example:
take the flowing group of apps:

	hits		ordered	precentage
kmag	34	kmail	345	43,40%
kmahjongg	56	kmplayer	145	61,64%
kmail	345	kmix	97	73,84%
kmenuedit	12	kmahjongg	56	80,88%
kmines	45	kmines	45	86,54%
kminspector	12	kmag	34	90,82%
kmix	97	kmouth	23	93,71%
kmmatch	2	kminspector	12	95,22%
kmousetool	12	kmtrace	12	96,73%
kmouth	23	kmenuedit	12	98,24%
kmplayer	145	kmousetool	12	99,75%
kmtrace	12	kmmatch	2	100,00%
total	795		795	

So if X = 90% and Max = 10
we have 6 applications that are on the 90% hit ratio and 10 places to fill.
that mens 4 big ones and 2 small meaning kmail kmplayer kmix kmahjongg in 64 pxls kmines and kmouth small in 22 pxls.
Orderer in the following way, in he middle kmail on its left kmplyer, and on it right kmix in the left corner kmahjong and in the right corner the 2 small remaining ones stacked.
The remaining ones should be displayed in a second scrollable screen all in 22 pxls.
(the order, depends on were the Kmenu icon is placed if it is on the left the most important icons are to the left in raptor)

Now X=70% and Max = 10.
We have then only 2 Apps.... but it would be a waste of space cause we would have 3 unused slots ... so we display 8 apps the ones in the 70% ratio in big and the remaing ones in small
2+6 = 8
The remaining ones are scrollable

Now X=100% and Max = 10.
In that case we display 10 applications in the first screen the remaining ones on the second.

The max well the menu works in multiples of 2 couse we can have in the same space a big icon or 2 small ones. so Max can be 2, 4, 6, 8, 10, 12, 14, 16, etc.. and depends how the shape and area the user defines for its raptor menu. In fact max also sets the minimum = max/2.

2. One pannel only.

This mens that you you only interact in one area of the screen, so that mouse precision becomes less important (no more losing the link in the menu structure), also cause hit areas are bigger you would get better fit's law results. (the fact that the database paces the most used apps close to you mouse should improve those results as well).
Scrolling: wen all the items on a given (sub menu/search result) don't fit one one raptor page you will have to scroll, scroling can be done via mouse wheel keyboard arrows or clinking on the arrows one the menu, the amount of scrolling actually used depends a lot on the X and max defined by the user, default values should be around X= 95% max =10 so that in theory only 2% 5% of the time would you need to use the scroll, raptor should ask it suser to redefine this values if scrolling is being overly used.

Navigation on the menu.

If you need to go up in the menu you can do that in 2 ways, by pressing the UP arrow on your keyboard, or using the navigational area on raptor itself, On the top left corner the are the users can see were he is at the moment be that favorites, search results or place in the menu structure, cliquing any of the icons should take you to that place in the raptor menu.
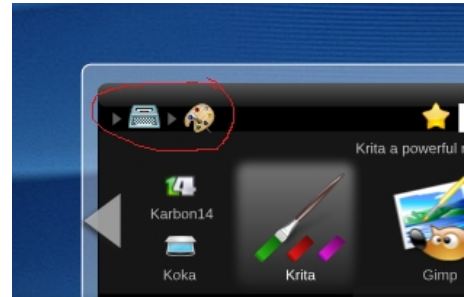
3. *New user action structured menu.*

We propose with raptor a redefinition of the menu structure more based on how the user see 's its apps and how it uses it.

play
        sound
                create
                listen
        image
        video
                Create
                view
more
        Accessibility
        Development
        Editors
        Games
        Documentation

surf
        Browse
        Mail
        Chat
        News
        File transfer
        Remote assistance
        Other

system/configure
        Terminal
        configure
                KDE
                Hardware
                Mandriva/Suse/Kubuntu/etc....
                Print
                Packaging
        File
        Monitoring

produce
        Text
        Spreadsheet
        Presentation
        Draw
        Publish
        Time Management
        Communication
   Database
        Finances
        Others

We know its far from perfect and must be seen as a point of start.

4. *Automatic find tool.*

After opening the menu using the kmenu button one can use normal menu structure method to find its App or he can start typing its name, that will make that the menu starts to show icons of applications based on on the typed letters and sorted out by the raptor usage database.

In the image attached one can see a normal find result based on the typing of "ko", notice that there is no need to type enter the contents should be automatically updated according to what the user typed.

Using the text under the application description raptor should be able to list you the applications that perform certain jobs. Example, typing "burn cd" should point you to K3B, "view movie" to kaffeine, Kmaplyer, etc.
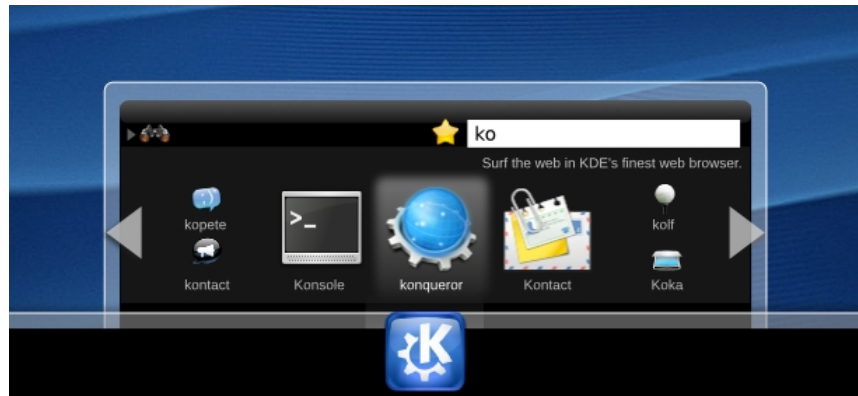
5. Favorites easily accessible.
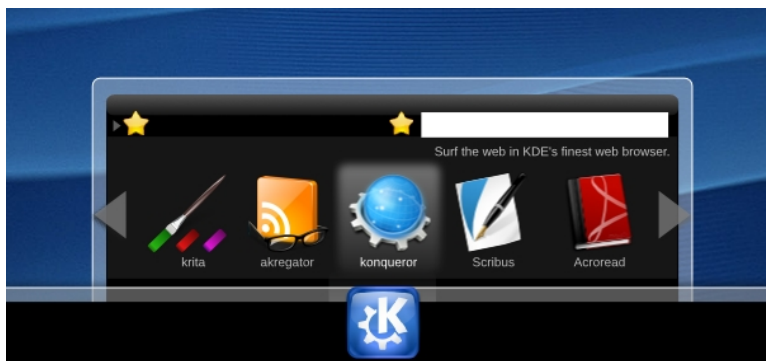
Next to the search area the user can find a favorites icon that points him to his favorite apps.
Right clinking it sows a dialog that allows the user to had apps to the favorites area, and decide on the best way to show them its up to the user to decide how to display the his favorite apps.
By default simply hading applications by drag and drop on top of the star area should make them into favorites.

The oldest favorite apps are bigger and the new ones are smaller, the user can keep hading apps until the max is reached them he will have 2 pages of favorite apps and scrolling will be needed, again, its up to the user to decide how he wants it to look.

6. Application description.

If a list only has one application or a its displays the following screen
It has a the normal small teaser description next to the search area, and a mare detailed description in the middle area.
It uses the 128 pxcl. icon and also shows wen was used last time.
This type of view should also be available via second mouse button click over a higlited application.

7. Highly user configurable.
The user should have the power to make raptor behave in the fashion he would like best, the menu should work nicely in any position not just the middle.

This is really just a WIP take it with a grain of slat. Wont be ready in the next month, and has huge room for improvement.
We still need to perform huge usability studies, and get user feed back.