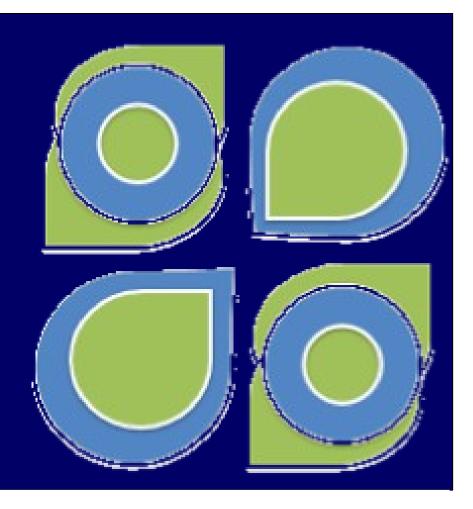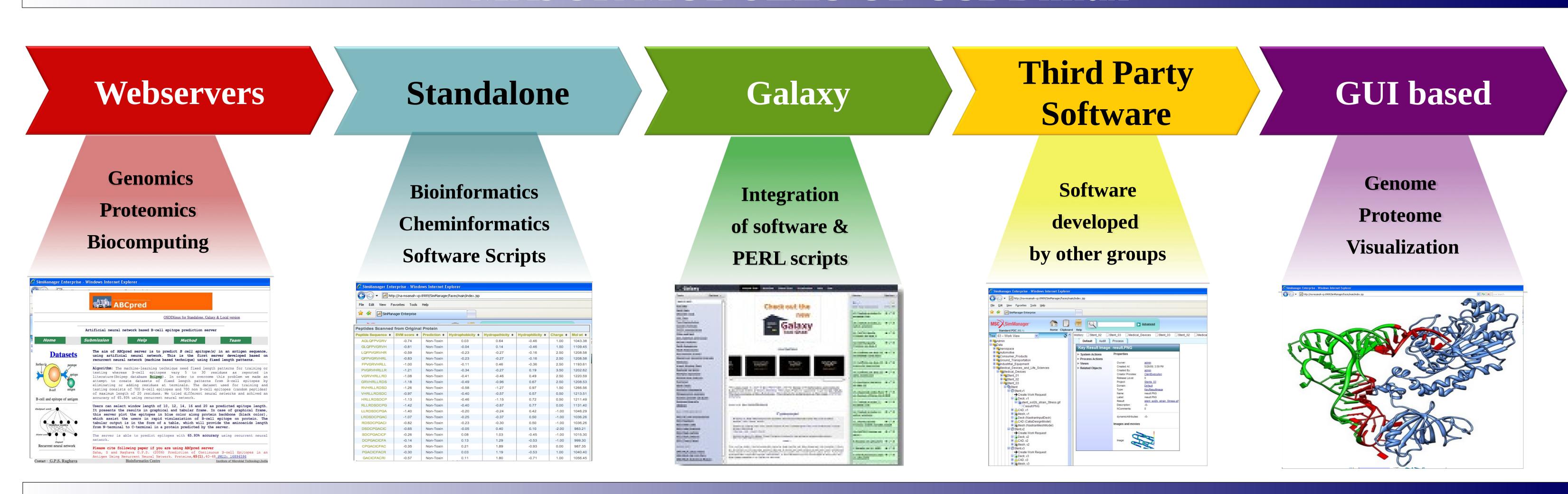# OSDDlinux: A Customized Operating System For Drug Discovery
(http://osddlinux.osdd.net/)

Open Source for Drug Discovery presents OSDDlinux, an operating system for drug discovery (customized linux) that integrates most of freely available computational tools required for drug discovery. It is an *in silico* platform for providing ambient environment for computer-aided drug design. First time, more than 100 web service developed at Raghava's group have been converted into standalone software. These standalone programs will allow users to run these services at large scale (genome, proteome & chemical libraries). OSDDlinux will bring down the cost of drug discovery as well as it will provide infrastructure for Bioinformatics, Chemoinformatics & Pharmainformatics.

MAJOR MODULES OF OSDDlinux

Webservers	Standalone	Galaxy	Third Party Software	GUI based
Genomics Proteomics Biocomputing	Bioinformatics Cheminformatics Software Scripts	Integration of software & PERL scripts	Software developed by other groups	Genome Proteome Visualization

MAJOR FEATURES OF OSDDlinux AND SERVICE TO COMMUNITY

➢ **Immunoinformatics**: software for designing subunit vaccine
➢ **Chemoinformatics**: tools for computer-aided drug discovery
➢ **Bioinformatics**: structure & function annotation of genomes
➢ **Pharmainformatics**: Important tool for pharm researchers

Educational tools
OSDDlinux facilitates students & researchers who wish to start their carrier in drug discovery

➢ Bootable Live DVD for occasional learning
➢ Loading on Laptop/PC for Windows/MAC users
➢ PERL scripts for basic bioinformatics
➢ R Scripts for developing QSAR models

In *Silico* Platform for Developers
Facilitate users in establishing their own or using existing infrastructure

➢ Online for developers with no infrastructure
➢ Infrastructure on existing linux setup
➢ Launching web services from local setup
➢ Source code of software and web services

Infrastructure for Developing World
Promote open source in following fields to provide infrastructure at very low cost

➢Assembling & Annotation of Genomes
➢Computer-aided drug design
➢Example-based learning of Web servers
➢Galaxy-based platform for system biology

EASY TO DOWNLOAD AND INSTALL

Installation on existing Systems
Most of scripts can be install on any Unix machine, we tested & created binary for following flavor's of Unix.

✓Ubuntu 64 & 32 bit
✓Fedora
✓CentOS
✓Scientific Linux
✓Apple/MAC OS-X
✓RedHat
✓BOSS

Online Web Server: OSDDlinux maintain online service for users who wish to use service but do not have required hardware.

OSDDlinux bootable DVD/USB
◆Visit http://osddlinux.osdd.net/livedvd.php
◆Download OSDDlinux full/base iso file
◆Use iso file to create bootable DVD/USB
◆Sotware are available to create bootable DVD/USB
  o NERO software for Windows
  o Disk Utility option on Apple-Mac
  o Brasero Disc Burner for Linux
◆Insert bootable DVD in DVD ROM and reboot machine
◆Ensure that 1st booting preference of your machine is DVD
◆You may use now OSDDlinux without installing.

Full Installation
◇Using above step boot your computer with bootable DVD/USB
◇Install at time of boot or click on Installation on Desktop

Virtual Box on Windows/Linux/Apple-Mac
❖Create a new machine in virtual box
❖Install in new machine using bootable DVD/USB

CONTACT for more Information

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OPEN SOURCE DRUG DISCOVERY