

GANBOLD Tsagaankhuu
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SUMMARY OF QUALIFICATIONS

- FreeBSD src committer since Dec 2013, doc committer since Feb 2008
- Strong skills in C, Go, PHP and MySQL
- Experiences in Perl, Java and shell programming
- Experienced system administrator with great knowledge of network and system security
- Outstanding debugging and troubleshooting skills in programming, networking and system administration
- Experience in embedded software development
- More than 10 years of experience in IT security
- Master of Science Degree in Computer Engineering
- Certificate of Achievement in C programming
- Fluent Russian, English and Mongolian language

EXPERIENCE

FreeBSD related works:

- Brought initial support of FreeBSD operating system on some ARM SoC such as Allwinner A10/A20 (Cubieboard 1, 2), Rockchip RK3188 (Radxa Rock board), Rockchip RK3288 (Firefly board) and early boot on Qualcomm Snapdragon 600 APQ8064 (IFC6410 board):
<https://svnweb.freebsd.org/base?view=revision&revision=245450>
<https://svnweb.freebsd.org/base?view=revision&revision=256949>
<https://github.com/tsgan/rockchip>
<https://github.com/tsgan/qualcomm>
- FreeBSD handbook translation into Mongolian (started Oct 2006, finished Apr 2007)
- Established Mongolian Unix User Group and its website
- System administration of FreeBSD servers including installing, updating and configuring:
 - Web (apache, nginx, lighttpd),
 - Mail (exim etc)
 - Database (mysql, postgresql),
 - Messenger (jabber etc)
 - Proxy (squid),
 - DHCP
 - DNS (bind)
 - Flow export using netgraph
 - PPPoE (mpd)
 - NAT
 - IDS (snort)
 - Firewalling (ipfw, pf)
 - ZFS
 - Jails
 - Asterisk, gnu gatekeeper installation and configuration
 - Hardening FreeBSD
 - Updating FreeBSD from source, building custom kernel, installing and updating ports

Since August 2014 **Freelance consultant and developer**, Ulaanbaatar, Mongolia

- Asterisk performance tests and improvements using g729 codec
- Configured Asterisk to use specific processors in FreeBSD
- Developed codes for H235 authentication when using ooh323 module in Asterisk
- Fax configuration for Asterisk
- Development of content filtering software using Go language
- Development of bus pass offering and tracking web site (buspass.herokuapp.com) in RoR
- Updated bus tracking and viewing application for Android

April 2009 – July 2014 Mobicom Corporation, Ulaanbaatar, Mongolia

Director of IT division

- Planning and implementation of corporate IT systems, security and networking
- Design and implementation of corporate TCP/IP backbone network for future scalability, reliability and security
- Design and implementation of security monitoring network
- Implementation of security best practices, security devices such as IPS/IDS, SIEM, Anti DDoS and DBAM systems
- Corporate IT security policy update
- Established Security Operation Center at the company
- Implementation of software development best practices including tools such as subversion, maven, hudson/jenkins, npanday, redmine
- Setup of test and debug environment for development purpose
- Virtualization of IT servers at the company
- Developed keyboard tweaks in Objective C for iOS devices
(<http://apt.thebigboss.org/stats.php?dev=ganbold>)

April 2004 – April 2009 MICOM Co. Ltd. (Internet Service Provider), Ulaanbaatar, Mongolia

Technical manager/System engineer plus with some systems programming and engineer/administrator responsibility

- Technical planning and implementation
- BGP multihoming configuration
- Developed Rideshare software that uses ArcWeb services at <http://www.rideshare.org>
- Developed php frontend for GNU gatekeeper billing
- System administration of more than 40 FreeBSD and Linux servers

Sep 2002 – April 2004 MICOM Co. Ltd. (Internet Service Provider), Ulaanbaatar, Mongolia

Senior Programmer plus with some systems engineer responsibility

- Did complete rewrite, development and design of ISP dial-up users billing software including ISP user management software in FreeBSD using PHP, Perl, C and MySQL
- Installed and configured Instant Messenger server Jabber for public use
- Developed Mongolian language support in Cisco VoIP IVR TCL script
- Developed VoIP prepaid and postpaid billing software
- Developed chat server in Java

Since July 2002 ALTRANS, INC., Saratoga, California, USA (<http://www.altrans.net>)
Contract software developer

- Developed class schedule search web site (<http://search.westvalley.edu>)
- Developed software that processes email files and imports school schedule data into MySQL in Visual Basic, C in Windows 2000
- Developed web sites in PHP/MySQL for commuters (<http://www.srvpooltoschool.org/>, <http://www.carpoolzip.com/deanza/>)
- Developed web survey pages in PHP/MySQL
- Developed web site that uses ArcWeb services

Oct 2001-Sep 2002 De Anza College, Cupertino, California, USA
Part time Laboratory assistant plus with some system administration responsibility

- Installed and configured FreeBSD server at the laboratory
- Installed LAN with 15 workstations and Windows 2000 servers in the new ESL laboratory
- Developed prepaid calling card selling web site in PHP/MySQL (<http://www.call2mongolia.com>)

Feb 2001-Sep 2001 MICOM Co. Ltd. (Internet Service Provider), Ulaanbaatar, Mongolia
System Programmer plus with some system administration and IT security responsibility

- Designed and developed some web based software such as ISP user management and ISP billing software in FreeBSD using PHP, Perl and MySQL
- Updated IRC chat applet

1998-2001 United Nations Development Program, Ulaanbaatar, Mongolia
System engineer with full responsibility of programmer and network administrator

- Connected more than twenty Mongolian Government agencies and rural areas to Government WAN
- Installed and configured more than twenty Windows NT and Linux servers
- Led training sessions for LAN administrators
- Developed first version of IRC chat applet in Java for Monstudnet
- Developed several tools including TCP/IP connection checking tool, text file converter between different character sets, simple phone book application, simple TCP/IP port scanner and TCP/IP ports listener tool
- Created several web pages using PHP/MySQL

1994-1998 Parliament of Mongolia, Ulaanbaatar, Mongolia
Senior programmer with full responsibility of system engineer and network administrator

- Developed programs such as Archive database system
- Prepared IT plan for the Parliament
- Built LAN with more than 150 computers
- Installed and configured Novell Netware and Windows NT servers
- Configured main Cisco router
- Developed first web site of the Parliament

EDUCATION & TRAINING

- 2001- 2002 De Anza Community College, Cupertino, California, USA
Certificate of Achievement in C programming
- 1989- 1994 Novosibirsk State Technical University, Russia
Master of Science Degree in Computer Engineering,
- 2010 Black Hat 2010 training, USA, certificate
- 2008 CIRT/CSIRT training, Tokyo, Japan, certificate
- 2007 Internet service providers seminar and workshop at Cisco Systems, Milpitas California, USA, USTTI (www.ustti.org) training), Certificate
- 2006 APNIC Internet Resource Management and DNS workshop, Ulaanbaatar, Mongolia, Certificate
- 2005 CISCO Multihoming workshop, Ulaanbaatar, Mongolia, Certificate
KADO eGovernment training, Seoul, Korea, Certificate
- 1998 CISCO ISP workshop, Kuala Lumpur, Malaysia
- 1995 Central Vocational Training Center of Taichung City, Taiwan
Certificate in Computer Science

PAPERS AND PUBLICATIONS

1. Ganbold Tsagaankuu, Dr. Esbold Unurkhaan, Erdenebat Gantumur
Go based content filtering software on FreeBSD
<https://2015.asiabsdcon.org/timetable.html.en#P4B>
2. Ganbold Tsagaankuu, Dr. Esbold Unurkhaan, Erdenebat Gantumur
Go-based Content Filtering Software on FreeBSD
https://www.freebsdoundation.org/journal/vol2_no3