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Watsh Rajneesh

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| Profile | I have about **14+ years** of IT Industry experience. I have worked in **NMS/EMS development** with programming expertise in **'Java'**, and C/'C++' and dynamic languages like PHP, VB Script, etc. I am proficient in the domain area of **SNMP** based Network Management Systems development and have worked on developing EMS/NMS systems and SNMP Agents on both pc-hosted and firmware environments.  I am proficient in **Java Enterprise Edition** web applicaiton development (and I am Sun Certified in Java Programming (**SCJP** 5.0), developing Java **Web Services** (**SCDJWS** 1.4), Web Component Development (**SCWCD** 1.4) and Business Component Development (**SCBCD** 1.3)). I have domain knowledge in cable broadband HFC networks, Storage Area Networks (including Fibre Channel, iSCSI, NFS) and since 2009 I have been actively working in Virtualization domain (especially Server Virtualization and Brocade Virtual Cluster Switching) on Brocade, VMware and Microsoft products.  I have been a distinction marks scorer throughout in my academic career. |
| Software Skills | |  |  | | --- | --- | | **Programming Languages** | **Compiled:** Java (SE 5.0+), C, C++.  **Markup:** HTML, XML  **Interpreted:** JavaScript, PHP, XSLT.  **Modeling:** **ASN.1 MIB**, UML, XML Schema | | **Operating Systems** | **RTOS** VxWorks 5.4/.5,  **Unices** (HPUX 11, Linux 2.4.x, Solaris 2.8, SCO),  Mac OS 9.1/X (10.1.5),  Windows (98/NT/2000/XP/2003/2008R2). | | **Technology Domains** | **Distributed Computing:** J2EE **Webservices** (SOAP 1.1, WSDL 1.1, UDDI 2.04, WS-I BP 1.0, JAX-RPC 1.2, JAXP, JAXR, JAXB, Webservices Design patterns), CORBA 2.0+, RMI, BSD 4.4 Socket API. (over 5yrs in all - expert)  **Network Management:** **SNMP** (v1, v2c and v3) (over 5yrs - expert)  **Java EE**: Servlets, JSP, Struts, JSTL, EJB 2.1+, iBatis, J2EE Design Patterns, **Webservices** (JAXR, JAXB, JAX-RPC 1.1, JAXP 1.2, SAX 2, DOM 2, TrAX etc.), **AJAX**, DHTML etc.  **Application Servers:** JBoss 4.0.3+, Tomcat 5.0+  **Web application framework:** JSF 2.0  **ORM frameworks:** iBatis  **Unit Testing:** Junit, TestNG  **Others:** Emma, PMD, Code Collaborator  **Others:** WiFi (802.11b/g and 802.1x), CAN 2.0 B, **IPv6**, IPSec. (familiar only) | | **Tools + Libraries** | **SNMP** – Advent Net WebNMS 2.3, **Agent Toolkit** 6.0, Agent Tester, **Envoy Wind Manage SNMP** 9.1/.4, HP Open View NNM 7, HP Web Jetadmin 7.5+, Net-SNMP 4.2.3 and later, MG Soft tools etc.  **Webservices** – AxisJ 1.2+, JAX-WS 2.0+, JAX-RPC 1.1, gSOAP.  **Version Control** – CVS 1.1, Clearcase 3.2, Subversion, VSS 6.0  **IDE** – **Eclipse 3.x**, MS Visual Studio 6 and later, Netbeans 3.0+, Code warrior pro 7, Tornado 2.2  **Modeling** – XML Spy 5, Rational Rose 2000, Star UML.  **CORBA ORB** – Visibroker for Java 4.1 and C++ 4.5, Sun JDK 1.3+ IDL, ACE TAO 1.5, Jac ORB 2.0 etc.  **XML** – XercesJ, JAXP 2.1, Xalan-J/Saxon, JDOM  **RDBMS** – Oracle 7.3-9i, Postgres SQL 9, mySQL 3.23  **Security** – Open SSL, 802.1x (EAP PEAP, TLS, TTLS and MD5 and LEAP), IPSec.  **AJAX** – DWR 2.0, JMaki for Java, **Primefaces 3.5+** | | **Certificates & Achievements** | 1. [**Sun Certified Java Programmer for J2SE 5.0**](http://www.sun.com/training/catalog/courses/CX-310-055.xml) **(CX-310-055)–** Passed with 90%. 2. [**Sun Certified Developer for Java Web Services**](http://www.sun.com/training/catalog/courses/CX-310-220.xml) **(CX-310-220)–** Passed with 88%. 3. [**Sun Certified Web Component Developer**](http://www.sun.com/training/catalog/courses/CX-310-081.xml) **(CX-310-081)–** Passed with 82%. 4. [**Sun Certified Business Component Developer**](http://www.sun.com/training/catalog/courses/CX-310-090.xml) **(CX-310-090)–** Passed with 85%. 5. **91 percentile** in **Competence in Software Technology** All-India level exam conducted by National Centre for Software Technology in 1999. 6. Certified Advent Net WebNMS 2.3 Developer in 2001. 7. Certified Internal Quality Auditor for ISO 9001:2000 at Velankani in 2001. 8. Certified in Test Driven Development and Agile methodology. | | **Trainings** | Trained in Advaced Java/J2EE programming, Linux Internals (Kernel Programming for Linux kernel 2.4.18), Embedded Systems programming, C/C++, RDBMS (Oracle 7.3, Developer 2000), .NET Platform, CORBA, **Oracle SQL and PL/SQL**, **ISO 9001**:2000 Quality process. | |
| Education | |  |  |  |  | | --- | --- | --- | --- | | ***Year*** | ***Degree*** | ***Institution*** | ***Subject & Marks*** | | 1998-99 | **PGDST** | National Center for Software Technology, Juhu, Mumbai (<http://www.ncst.ernet.in>) | PADS –    55.00%  COOS –   73.40%  DBMS –   65.70%  Network– 78.87%  OOPS –   71.00%  **Overall –  68.50%** | | 1994-98 | **BE (Electronics)** | Shivaji University,  Kolhapur ([http://www.kbpcoeps.org](http://www.kbpcoeps.org/)) | 1st SEM.-66.33%  2nd SEM.-66.37%  3rd SEM.-68.00%  4th SEM.-68.43%  5th SEM.-70.27%  6th SEM.-68.53%  7th SEM.-63.60%  8th SEM.-69.47%  **Overall -  67.62%** | | 1991-93 | **HSC** | Bihar Intermediate Council, Patna | PCM – 76%  **Overall – 76%** | | 1991 | **SSC** | Bihar School Exam. Board, Patna | **Overall – 83.7%** |     **Note:**  PGDST = Post Graduate Diploma in Software Technology.  PADS = Programming algorithms and data structures  COOS = Computer Organization and Operating Systems  OOPS = Object-oriented Programming Systems  PCM = Physics, Chemistry and Mathematics.  **Academic Achievements:**   * I topped at School level in Xth (SSC) Examination, in 4th through to 6th Semesters of BE and Network module of PGDST. * I have secured above distinction marks (overall) throughout my academic career. * **Scored 90% in Sun Certified Java Programmer for J2SE 5.0 exam.** * **Scored 88% in Sun Certified Developer for Java Web Services 1.4 exam.** * **Scored 82% in Sun Certified Web Component Developer 1.4 exam.** * **Scored 85% in Sun Certified Business Component Developer 1.3 exam.** |
| Professional experience | |  |  |  | | --- | --- | --- | | 2007 Oct – Present | [**Brocade Communications Systems**](http://www.brocade.com/) | San Jose, CA, USA | | Staff Software Engineer | | |  * [**Host Connectivity Manager**](http://www.brocade.com/forms/getFile?p=documents/data_sheets/product_data_sheets/HCM_DS_00.pdf) **(Oct 2007 – Jul 2009):**   Host Connectivity Manager is an element manager for Brocade Fibre Channel HBAs (Host Bus Adapters) and CNAs (Converged Network Adapters).  **Responsibilities:** I worked on the transport layer of the product which used JSON RPC with a Java client and C++ server (hosted on Abyss Web Server). My contributions were more on   1. Defining the data model, 2. Defining interface between client and server, transport using JSON RPC protocol over https, 3. Providing EJB session bean façade for integration with Brocade Network Advisor product, 4. Mock testing the client using Java mock web service emulating the host and adapters on the host, 5. Swing UI development etc.   **Tools & Technologies used:** Java, Swing, Tomcat 6, IBM Rational Clear case, JSON-RPC.   * [**Brocade Network Advisor**](http://www.brocade.com/products/all/management-software/product-details/network-advisor/index.page) **(Aug 2009 – Present):**   Brocade Network Advisor is the umbrella network management solution which provides management for all Brocade products, including FC/Ethernet switches. Wireless LAN products, Brocade host adapters and virtual infrastructure management.  **Responsibilities:** I worked on the server/host management modules of the product.   1. HCM (see above product) integration with Network Advisor, both via EJB session façade and via Link and launch through a proxy web service. 2. Virtrual infrastructure management which includes discovering ESX hosts via the vCenter server using VIJava SDK, 3. Develop Microsoft System Center Operations Manager (SCOM) Management Packs. 4. Develop VMware vSphere client plug-in for VMware vSphere 4.x. 5. Develop Brocade SAN Analytics Pack for VMware vCOps 5.6. Demoed this at VMworld 2013 ([Tweet on my demo](https://twitter.com/herlock/status/372486992656728065/photo/1)) 6. Worked on fault and discovery modules for managing both SAN and IP Brocade devices. 7. Worked on web client (using JSF 2.0) and primefaces 4.0 for Network Advisor 12.3 release.   **Tools & Technologies used:** Java, EJB 3.0, JBoss AS 5.0/7.2, HornetQ JMS, iBatis ORM, VMware vSphere/vCenter 4.x+, Hyper-v, Microsoft System Center Operations Manager, System Center Virtual Machine Manager, Powershell, VBScript, C#.NET, IBM Rational Clear case, JSON-RPC, PostgreSQL, Sybase etc. |
|  | |  |  |  | | --- | --- | --- | | 2007 Jan – Sep 2007 | **[Proxilliant Systems Corp.](http://www.proxilliant.com/)** | Maynard, MA, USA | | Senior Software Engineer | | |  * [**Cable Access Management System**](http://www.proxilliant.com/index.cfm/SolutionsandProducts/CableAccessManagementSystem) **(Jan 2007 – Present):**   CAMS is an integrated software and hardware solution whose goal is to manage the HFC network and also to improve the upstream bandwidth by suppressing the ingress thereby ensuring high availability of VOIP and other advanced services.  **Responsibilities:** The work involves developing the web interface to managing the HFC plant by managing the dynamic ingress blocker devices spread in the HFC network. I had been instrumental in designing the **web services interface** to enable integration of Java on the business logic tier with PHP on the web tier. I was also involved in architecting and developing the **performance management** module for the product from scratch. I also spearheaded the **Web UI development using** **AJAX** approach, in the product.  **Tools & Technologies used: Fedora Core 4 Linux**, Java, JAX-WS 2.1, PHP 4.3.7, Apache 1.3.31, Tomcat 5.5.17, CVS 1.1, **SNMP v1/v2c, DOCSIS 1.1/2.0**, DWR 2.0.1, several AJAX libraries (JMaki, Ajaxtags etc), Cewolf/JFreechart for plotting. |
|  | |  |  |  | | --- | --- | --- | | 2005 Oct – 2007 Jan | [**Aditi Technologies Ltd**.](http://www.aditi.com) | Bangalore, India | | Design Lead | | |  * **Aditi Staffing Portal (Oct 2005 – Jan 2007):**   Aditi staffing portal is aimed at web enabling the staffing activities, facilitating ease of access to staffing information, tracking the effort spent by staffing personnel, collecting metrics data for performance and maintianing an institutional memory of clients and applicants.  **Responsibilities:** Collecting requirements, suggesting new features which can be automated or data that can be tracked, tracking and documenting the features, design changes and issues and developing the solution using J2EE 1.4 technologies.  **Tools & Technologies used:** JBoss AS 4.0.3, Xdoclet 1.2.3, Struts 1.2, IntelliJ IDEA 5.0.2, CVS 1.1, Scarab, MySQL 5.0. |
|  | |  |  |  | | --- | --- | --- | | 2003 Mar – 2005 Oct | [**Hewlett Packard GlobalSoft Ltd.**](http://www.hp.com) | Bangalore, India | | Associate Systems Analyst | | |  * **HP Jetdirect Firmware (May 2004 – Oct 2005):**   HP Jetdirect (<http://www.hp.com/go/jetdirect>) is a network adapter device used to interface printers to networks (ethernet, token ring, wireless LAN). The firmware has drivers and application modules over the VxWorks 5.5 RTOS. The cross-development host is HP-UX 11 and  GNU gcc compiler toolchain is used for an ARM target. I maintained and enhanced the **SNMP agent** application module in the Jetdirect firmware.  **Responsibilities:** The work involved maintaining MIBs across varities of Jetdirect products, providing instrumentation for new features and fixing issues in the agent. Been involved in the initiative to implement IPv6 support at the SNMP agent. Incorporated MIB changes to the proprietary HPPrintServerMib to deprecate IP v4 specific OIDs with IP neutral OIDs. Corresponded with Wind River Systems to get the latest updates to MIB-II for TCP, UDP and IP groups implemented in the upcoming Wind Manage SNMP which have IP neutral tables augmentation to the respective groups. Also implemented an extension to the trap destination table at the agent to support FQDN of the trap destination host. This was done with backwards compatibility in mind by providing an additional table which was mapped to the original trap destination table using the destination host IP. I also worked on porting the Jetdirect’s implementation of SNMP agent to HP projector’s network module.  **Tools & Technologies used: VxWorks** 5.5 RTOS, HP-UX 11, GNU GCC toolchain for ARM, Wind Manage (erstwhile Envoy) SNMP 9.1/4, ClearCase 3.2, **SNMP v1, v2c and v3.**   * **HP Web JetAdmin Plugins (Mar 2003 – Oct 2005):**   HP Web Jetadmin is a web-based print management solution available for free at <http://www.hp.com/go/webjetadmin>. It helps optimize device utilization, control color costs, and streamline supplies management by enabling remote configuration (over SNMP), monitoring, and troubleshooting of network printers and associated print infrastructure components.  **Responsibilities:** My role in the project used to be that of developer engineer for 1 year (Mar 03 to Mar 04) during the time the work was being transitioned for the first time to HP India. Since May 04 I transitioned to HP Jetdirect firmware development (mentioned above) and I lead the WJA related projects in HP India mentoring developers and interfacing with the end customers. Since May 2005, I have been involved in the tech lead activity for several WJA related plug-in work. Notable among them is the work we did for the HP Corvallis (and HP’s customer Abercrombie & Fitch, Ohio), which required WJA to forward consumable low alerts to a SOAP **Webservice** hosted on **Weblogic** 8.0. I was instrumental in designing and developing this proxy product (a.k.a. WJARC or Web Jetadmin Automated Replenishment for Consumable). Another work we did was for HP Roseville’s customer Ford Motor Company, to integrate Remedy ARS at Ford with Web Jetadmin alerts for printer error states. This sub-project was called Alert Conveyance plugin. Some other plugins were done for integrating HP WJA with HP OpenView product.  **Tools & Technologies used:** C/C++, HTS (Hyper Text Scripting language, HP Proprietary), DAO (Device Abstraction Object Language), JavaScript, J2EE (AxisJ 1.2, Weblogic 8.0), SNMP, Webservices, PML (Printer Management Language, HP Proprietary).  **Accomplishments:** I received 5 performance **HP E-Awards** during my tenure in the company for my work on the above mentioned projects. |
|  | |  |  |  | | --- | --- | --- | | 2002 Sep – 2003 Mar | [**ADC Communications Pvt. Ltd.**](http://www.adc.com) | Bangalore, India | | Software Engineer | | |  * **SNMP Proxy Agent for Digivance (2002 Sep – 2003 Mar):**   Digivance range of products are from ADC’s Wireless Business Unit. The Digivance system improves wireless networks by extending coverage from existing cell sites to hard-to-reach areas. LRCS (Long range coverage solution) is one of the products in the Digivance range. The SNMP proxy agent project was aimed at providing northbound SNMP manageability to Digivance range of products which were essentially non-IP devices. An EMS solution for Digivance used CAN (Contorller Area Network) protocol to manage the LRCS devices. The SNMP Proxy agent translates the CAN messages to SNMP PDUs and passes it to any North Bound managers.  **Responsibilities:** Designed and developed the SNMP proxy agent, starting with defining the proprietary MIB, mapping the SNMP traps to CAN reports, and packaged the product as an installable.  **Tools & Technologies used:** Advent Net Agent Toolkit (C Edition) 6.0, MS Visual Studio .NET 7.0, NSIS 2, Advent Net Agent Tester 1.0 beta. |
|  | |  |  |  | | --- | --- | --- | | 2002 Jan – 2002 Sep | [**Quark India Pvt. Ltd.**](http://www.quark.com) | Mohali, India | | Software Engineer (Quark XPress R&D) | | |  * **Quark XPress 5.0 (2002 Jan – 2002 Sep):**   Quark Xpress (<http://www.quark.com/products/xpress/>) is a leading page layout software. I worked on the maintenance and enhancement of Quark Xpress table feature and some other Xtensions development.  **Responsibilities:** Worked on the Tables Xtension for feature enhancementstargeted for release of QuarkXPress 6.0. The work involved rotation and skewing of tables in a QuarkXPress document, Clipping paths for picture cells of table and supporting UNDO/REDO for features like converting a table to text and converting from a text box to a table box. Made an Xtension of QuarkXPress 5.0 for Hyphenation Exception Export/Import to a text file in CSV format.  **Tools & Technologies used:** MS Visual Studio 6.0, Codewarrior Pro 7, Mac OS X 10.1.5. |
|  | |  |  |  | | --- | --- | --- | | 2000 Nov – 2002 Jan | [**Velankani Information Systems Ltd.**](http://www.velankani.com) | Bangalore, India | | Telecom Software Engineer | | |  * **Telecom Management Platform (2001 Aug – 2002 Jan):**   This project was an initiative by **Velankani** to develop a **NMS builder toolkit** (in the likeness of **AdventNet’s WebNMS**) using technologies like SNMP/CORBA/XML/J2EE. The toolkit had features like autodiscovery of networked devices, fault management support, performance and configuration management.  **Responsibilities:** My role in the project was, at first, to develop a framework for the GUI of the client side and some GUI at the server side (for configuration purposes). The resultant framework uses XML data to build the GUI and that data is supposed to be provided by the System Integrators either statically by editing the respective GUIML files or dynamically from the code. Any change in the GUIML files reflects in the GUI automatically without requiring the System Integrators to write even a single line of code. The System Integrator will only need to provide the event listener codes. Technologies used are the J2EE (at the business logic layer) and XML (for messaging) together with Java Swing (for the GUI).  **Tools & Technologies used:** Java Swing, J2EE (Servlets/JSP), Oracle 8i, **JBoss AS**, SNMP.   * **Element Management System For Siemens Accession Device (2001 Mar – 2001 Jul):**   The aim of the project was to implement the EMS server and the EMS client using the Advent Net's WebNMS2.3 and Management Builder toolkits for Siemens Communications Inc Accession (<http://www.icn.siemens.com/carrier/products/bbaccess/accession.html>) access nodes.  **Responsibilities:** My role in the project was to implement ADSL performance and configuration management interfaces in **CORBA** (using **Java IDL ORB** which was available with JDK1.3) for the **North bound interface**. The IDL interfaces were defined by the **DSL forum's WT-046v4.0 for ADSL configuration and performance management**. The work involved writing a **CORBA-SNMP Gateway server** at the level of the EMS server, which translated a northbound CORBA method invocation to the corresponding SNMP get/set request. The MIBs used for this purpose were the Entity MIB [RFC 2737], the ifMIB [RFC 2233] and the ADSL-Line-MIB [RFC 2662].  **Tools & Technologies used:** CORBA, Java 1.3 IDL ORB, Advent Net WebNMS 2.3.   * **EMS for Eulix DeltaX Device (2000 Nov – 2001 Mar):**   The aim of the project was to implement the client side of the EMS for Eulix’s (a spin-off of NEC Inc, <http://www.necus.com/companies/8/eulixnetworks.htm>) **DeltaX** devices, which are the gateways for VPNs. The server end was existing with a **North** bound CORBA interface. The server end CORBA interface used the **TAO ACE ORB** with servants written in C++ whereas the client was a Java Swing GUI using Visibroker for Java ORB 4.1.  **Responsibilities:** My role in this project was to develop the CORBA client layer for the EMS client using Visibroker for Java.  **Tools & Technologies used:** CORBA, Visibroker for Java ORB 4.1, JLoox GUI library. |
|  | |  |  |  | | --- | --- | --- | | 1999 Nov – 2000 Nov | **Software Exports (I) Pvt. Ltd.** | Pune, India | | Software Engineer | | |  * **Network Fault Manager (NFM) for Lucent (1999 Nov – 2000 Oct):**   SNMP Feature Package was a Network Management system for Lucent devices, that allowed network managers to manage SNMP devices through CGI-based Web-interfaces. It used **CORBA** ORB as middleware, thus, making it inherently distributed, platform independent and language independent. CosNotification service was used for event notification of SNMP traps. The various Client applications for network management were: **NetSim** – a network topology and network drawing graphical interface that displays a particular network. Features like zooming and panning are available which allows a manager to view a particular network at any given level. From each node, the Alarms Page, Messages Page, MIB Browser can be invoked. **MibBroswer** - allows a manager to perform SNMP Get/Set/Walk on SNMP variable(s) for a particular network device. **Alarms Page** - displays alarms on a WUI display as they are being forwarded through a notification channel by a Resolver object in real-time. The fields (for e.g.: Perceived Severity, Probable Cause, Notification ID) displayed in the Alarms Page are compliant to the X.733 specification for Telecom Management  **Responsibilities:** Porting NFMTrapd and NFMBrowserd from Linux to Windows, wrote Java/CORBA for Resolver which resolved an incoming SNMP trap pdu and published the event on the CosNotification channel, wrote an installer creator tool in Java. As a subproject to this project, I was involved in upgrading the SNMP stack to use the then latest version of UCD SNMP 4.1.1, and porting of NFM daemons from the use of UCD SNMP to HP Open View stack (NNM 6.0).  **Tools & Technologies used:** UCD SNMP 4.x, Cygwin B-20, HP OV NNM 6.0, SNMP v1/2c, CORBA, Visibroker for Java 4.x, Perl, RH Linux 7.2. |
| Academic Projects | The following projects were done as a part of NCST ([National Center for Software Technology](http://www.ncst.ernet.in))’s PGDST curriculum:  **Post Graduate Diploma In Software Technology (1998 Nov – 1999 Oct):**   * **Sales order management system:** This project was done in ORACLE 7.3 & DEVELOPER 2000 (FORMS 4.5 & REPORTS 2.5) and was of the medium complexity. The forms include: client master, product master, salesman master, manager master, employee master, sales order data entry, challan data entry, invoice, etc. The reports include: product-wise sale report, sales-order, month-wise sales report, challan-details report, etc. * **Computer Network Simulator:** This project was done in C language on a SCO UNIX platform, and deals with "flow-control using serial nos. and acknowledgements" at Data link layer level. The simulation of speed mismatch was done by allowing receiving routine at both ends (assuming only two hosts on a point-to-point link) ignore their input with a probability of 10%. Use of 1-bit sliding window protocol, using GO-BACK-N error recovery is implemented, along with ACKs, NAKs, TIME-OUTs, PACKET-DISCARD, SEQ-NOs, RETRANSMISSIONs, etc. * **Relational Database Management System:** This project was done using the OOPS concept and implemented using **C++** on **SCO UNIX**. A product which was called **PHOENIX** was developed which can generate relations, is persistent, can parse the user inputs for lexical correctness of SQL statements entered at "SQL>" prompt, and supports security features like grant/revoke to/from user by either another user or a DBA. SQL statements supported include, creation of database, creation of user, creation of table, insertion / updation / deletion of records from table, grant / revoke, dropping of table, selecting from table, etc. * **File System Simulation:** This project is done in C language on a Red-Hat Linux 6.0 Platform. A file system was simulated using a big flat file on the OS provided file system. The basic file system structures supported are, the SuperBlock structure carrying the information of the whole file system, the Inode structure which carries information of each individual file, Directory Entry structure which is particularly meant for the directory files, and the DataBlock structure which carries the data space where the information is written and a pointer to the next data block allocated for that file, thus, a file in our system can grow to the maximum disk space (which can be configured ) . At the command prompt of the simulator, the user can perform: creation of file specifying the path and the mode of operation, make a directory, open an existing file, write into a file, display the contents of file, change to a certain directory in the file system, change mode and change owner, list the contents of a directory, move the contents from source file to destination file, copying files etc. |
| Open Source Projects | The following projects were contributions to open source:   * **Mibble Browser:** An SNMP MIB Browser. Available at [http://www.mibble.org](http://www.mibble.org/) . The application uses Mibble parser library and Westhawk SNMP library to provide a UI for browsing ASN.1 MIB files and performing snmp operations. |