Linux is coming out of the closet and its anorak wearing advocates are being joined by suited sales execs as a number of mainstream vendors begin to push the open source operating system (OS). For example, IBM, Linux’s most voracious supporter from technology’s top tier, continues to invest millions of dollars in the open source operating system while delivering a multitude of fully Linux loaded servers.

Elsewhere in the industry, Sun Microsystems plans to expand its line of Sun Cobalt Linux appliances and will ship a range of Linux ‘edge’ servers from the middle of this year. Intel is also climbing aboard the bandwagon and touting Linux as a low cost alternative to Unix.

Software vendors are getting in on the act as well. Oracle has announced expanded support for Linux through its Oracle9i product line and plans to collaborate with Red Hat on the latter’s Advanced Server offering. SAP is also busy promoting mySAP on Linux. Elsewhere, both ACPAC and Sage are targeting the mid-market with business management apps capable of running on the OS.

Furthermore, a number of organisations in the Middle East are actually beginning to deploy Linux. Petrochemical Development Oman (PDO), for example, has implemented a Linux cluster in an attempt to reduce its total cost of ownership (TCO). Elsewhere, Aramco began running a 128-processor Linux cluster at the beginning of the year. The oil giant is using Linux clusters for its parallel applications. Zaki Awwami, senior systems analyst at Saudi Aramco EXPEC, explains that the company went with Linux because it was looking for a cheap yet effective way to run its seismic applications.

“We were looking for a cheap platform that can deliver high parallel and performance value... [By using Linux] we can take a programme, divide it, let each set of processors do the work, combine them and then we can get the results quickly,” he says.

In addition to the oil & gas operators, Linux continues to spread like wildfire through the region’s university campuses. Saudi Arabia’s King Fahd University, King AbdulAziz University and King Saud University have all deployed Linux while the Dubai-based branch of the University of Wollongong runs its web server on the Unix-like OS. The educational institution opted for Red Hat 7.1 due to its stability and flexibility. It also achieves substantial cost savings when it comes to licenses.

“Educational institutions with large student populations tend to have a huge financial investment in IT infrastructure, and when you’re paying for software per seat or per user, licensing costs eat up quite a considerable portion of the IT budget,” says Richard Booker, IT manager at the University of Wollongong, Dubai.

Government interest is also growing. According to Red Hat Middle East’s business development manager, Yahya Kassab, it will be the fastest adopter of Linux in the region, behind the oil & gas sector. For example, Bahrain’s government is already running Red Hat 7.2 on four servers, including two
Compaq-based proxy servers and an Apache web server, due to Linux’s enhanced security.

“With Microsoft there are a lot of security holes, which you cannot fix yourself. We don’t claim that there are no security holes in Linux, but there are not so many. And because it is open source you are able to fix [any problems] yourself,” says Hassan Al Eid, the government’s data network manager.

As the current crop of local case studies suggests, the commercial value of the open source OS is at the server level. Ryan D’Souza, product marketing manager for industry standard servers at HP, reports that interest in Linux is growing across the board. “This interest is turning into commercial value and, without revealing figures, we are working on Linux solutions for a number of opportunities. They are mainly in the education sector and based around Beauwolf clusters and high performance computing,” he says. Furthermore, he says the channel, especially those with a Unix background, is also getting in on the act as they realise a Linux offering improves their competitive edge and that there is money to be made from open source services.

“The channel will make its money on services and those that are smart are already investing in Linux expertise because they know that being able to reduce their bid by 15-20% could be the difference between winning and losing a contract,” comments D’Souza.

There are a number of reasons for Linux’s growth, such as its close ties to Unix and its much touted reliability and scalability.

According to Ferhad Patel, market development manager, Intel Middle East & North Africa, the lines between Linux and Unix are becoming blurred as the former continues to make inroads into the server OS market. The similarities between the two operating systems make migration easier for staff with Unix skills. The continued support for Linux from the Unix vendors also helps, he says.

“The affinity programmes from the Unix vendors will also accelerate the process. We see Linux replacing Unix over time. Intel does not position Linux against Microsoft Windows, but purely against Unix, and perhaps Solaris,” adds Patel.

Another factor is the Unix upgrade cycle. Patel suggests that as companies within the region with Unix consider upgrading their server OS, they will increasingly consider Linux.

“There are a lot of organisations at the minute thinking about whether or not they should upgrade their Unix systems, which will cost them a fortune. These people are, therefore, starting to look at Linux,” he says.

Linux’s ability to solve a number of a CIOs major headaches is also driving its popularity. “CIO’s experience two main pains — data chaos and high TCO. Linux is really picking up because it addresses these — data chaos because Linux helps the better management of systems and it reduces TCO,” says Dr Rudolf Simmer, competitive sales and Linux evangelist with IBM CEMA.

The ability to reduce cost is well demonstrated at the high end server level. Companies that have been running a Unix RISC architecture can save up to 50% in costs by moving to Linux while also boosting reliability.

“It also has commercial value on the management side because if you are able to consolidate servers then you can ease management pain,” adds Simmer.

Linux will also grow in the mid-tier environment within the next twelve months as more vendors make Linux applications available. For example, Oracle9i Application Server now runs on Linux and other vendors are also porting their applications to the open source OS.

Johann Muller, product sales manager, Sun Microsystems Middle East & Africa, believes that the edge, which he defines as firewall and proxy servers,
also a key growth area for Linux. The reason for this is cost. “Most of these applications at the edge are selected on price/performance ratio — the cheaper it is the better it is,” he says. “Linux is going to dominate at the edge because there are no licence fees or the same burden of cost as there is with NT.”

While Linux looks set to succeed at the server level, its future at the desktop is more circumspect. The majority of the large vendors are unwilling to invest serious money into this area simply because they feel Microsoft’s dominance is unassailable. Although IBM is completing work within the region to Arabise Linux, Simmer confides “that it is not a good idea to attack someone that has a 95% market share.

Patel reports that Intel’s corporate line is “we do not support Linux at the desktop” and suggests that even if the vendor did there is not a market for the open source OS at the desktop due to a lack of support skills.

“If you look at the type of person supporting the server and the type of person using the desktop then you have a very disparate level of skills. The desktop user does not have the kind of skills needed to run Linux at the desktop. Also, they want support from a helpdesk and I don’t think this is available now for Linux,” he says.

Worldwide, Linux on the desktop hasn’t really happened. However, there is growing momentum behind Arabised Linux in the local market.

IBM’s local operation has, for example, recently finished Arabising the major components required to run Linux on the client side and is also working on Arabic support for Motiff and X-term, the Word component of Open Office and the Mozilla browser.

Elsewhere, grassroots development group, Arabeyes has been developing Arabic support for KDE and users can already read/write in Arabic. Work on Gnome 2.0 (GNU Network Object Model Environment), a graphical user interface for users, is almost complete and was expected to ship during June.

III

Dr Salah Almajdoub, president, Bahrain Information Technology Society (BITS) believes that there will be a real migration towards Linux at the desktop within the next two years. The main reason for this, he says, is the reduction of software piracy within the Middle East.

“A lot of people are using pirated software, but now they are beginning to look to the legal option. However, they cannot always afford this so Linux is a good option,” he says.

Dr Khaled Al Ghoneim, president of the Saudi Computer Society, agrees and says that the work of the Business Software Alliance (BSA) will hasten the process. “As the BSA steps up its activities and people realise that they can no longer use pirated software they will look for a cheap alternative. Arabised Linux at the desktop can provide this,” he says.

Others believe Linux’s much touted benefits compared to Microsoft Windows will drive adoption of the Arabised OS. Mohamed Eldesoky, systems engineer at handasarabia, says that security will be the telling factor.

“A lot of people who are simple computer users are tired of the virus nightmare with Microsoft Windows… so they will move to another, secure OS that provides them with the functionality they need. In our case, it is the ability to make Arabic documents,” he says.

Low cost is also going to be a factor. According to Anas Tawileh of Nextlan Internet Technology, the growth of Linux at the server level will drive desktop adoption as companies aim to create low cost homogeneous environments that reduce support and training expenditure while improving performance.

“Users may not be ready to use Linux in their homes yet but in the business world, where spending is the primary concern, Linux at the desktop level will reduce IT spending in the enterprise,” he says.
Red Hat’s Kassab concurs and suggests that because companies provide skilled IT staff it is irrelevant whether the user understands Linux or not.

“It is too early to have Linux on the home PC because of the lack of skills and the extras that people want, such as games. On professional PCs, however, I see no problem with people running Linux. In fact, some figures show Linux as having a 5% share of the desktop market, which is up there with the Macintosh OS,” he says.

While Linux’s local fan club is convinced that it will succeed at the desktop, the most important question remains ‘where.’ The most obvious answer is within the university environment where cost reduction is paramount and a constant source of open source skilled IT graduates and undergraduates are assured.

IV

However, if Arabised Linux is to have any commercial value a paying market needs to be found. BITS’s Dr Almajdoub sees commercial value in the small-to-medium sized business sector — a potential huge market considering the size of most of the region’s organisations.

“Arabised Linux is important because now you can have a medium sized company that can run on a simple set-up that is cheaper than it used to be,” he says.

Nextlan Internet Technology’s Anas Tawileh agrees and suggests that local companies will not only cut costs on the software side, but also by being able to deploy cheaper hardware.

“The are obvious savings if you can use cheap Intel-based hardware compared to other proprietary hardware. Intel pushing more support towards Linux and releasing new lines of server processors at very good pricing levels, will definitely help smaller businesses and governmental agencies build IT infrastructures without compromising performance,” he says.

“Linux over Intel will give organisations an alternative to expensive machines. Intel with Linux is a good option because it gives the same performance at a lower price,” adds Red Hat’s Kassab.

The region’s less cash rich countries, such as Syria, Jordan and Egypt, are another potential market, especially if they run Linux on low end hardware. Handsarabia’s Eldesoky says companies in Egypt are already beginning to look at Linux as a cheap alternative to Microsoft. According to a spokesperson at Arabeyes, the Egyptian Ministry of Telecommunications is seriously contemplating the adoption of open source software.

Raed Bilbessi, CEO of INTAJ, says Linux could also gain ground in Jordan and help boost its disappointing PC penetration.

“Low cost software packages will not harm PC penetration in Jordan and can only help... So provided the software applications are available, easy to install and maintain, and user-friendly, yes, open source software may very well provide more favorable entry terms for low income groups,” he says.